Simulation Parameter

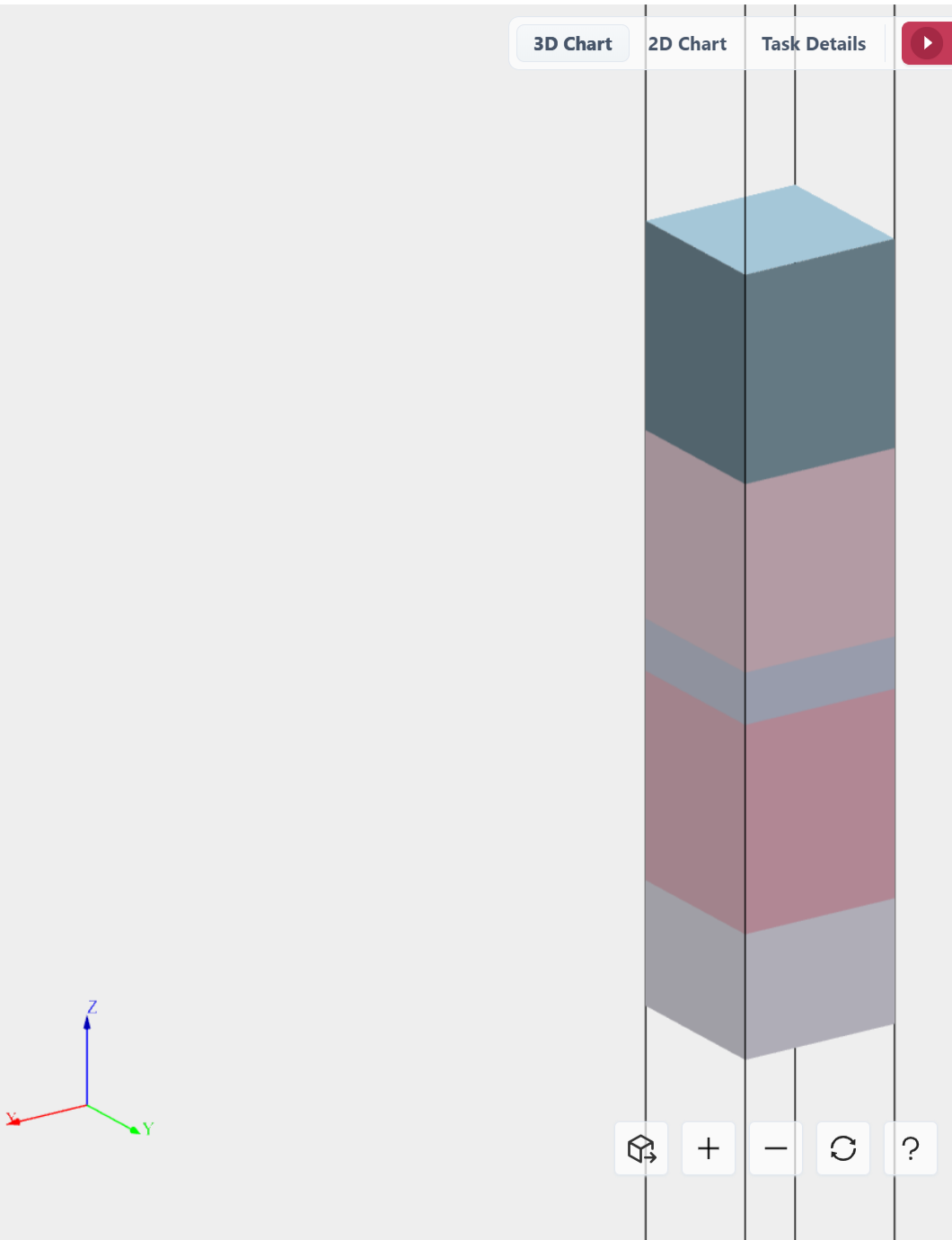
STUDIES
FDTD draft

Editor

CONFIGURATION
Simulation Domain
Run Time
Grid Specification
Boundary and Symmetry
Shutoff Condition
Show More

STRUCTURES
SOURCES
MONITORS
SCRIPT OBJECTS

3D Chart 2D Chart Task Details Run Validation pass



Visibility

Axes
Ruler
Simulation Domain
Sources(1/1)
Monitors(0/3)
Structures(7/7)
SiO2
ITO
PEDOT
P3HT
Al
ITO_Coating
Au_Nanosphere

Simulation Parameter

STUDIES
FDTD draft

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STRUCTURES
SOURCES
MONITORS
transmittance
reflectance
field_xz

SCRIPT OBJECTS

Edit Monitor Help

* name
field_xz

* type
FieldMonitor

center + size bounds

center
X 0 µm
Y 0 µm
Z 0 µm

* size
X Infinity µm
Y 0 µm
Z Infinity µm

For 1D/2D monitors, set the size of the corresponding dimensions to 0.

fields
Ex × Ey × Ez × Hx × Hy × Hz ×

Flux and Poynting vector will be included in the result if all necessary fields are selected.

* wavelengths frequencies unit: µm

Enter range Custom

Apply

hart 2D Chart Task Details Run

Validation pass

Visibility
Axes
Ruler
Simulation Domain
Sources(1/1)
Monitors(0/3)
Structures(7/7)
SiO2
ITO
PEDOT
P3HT
Al
ITO_Coating
Au_Nanosphere

Simulation Parameter

STUDIES
FDTD success

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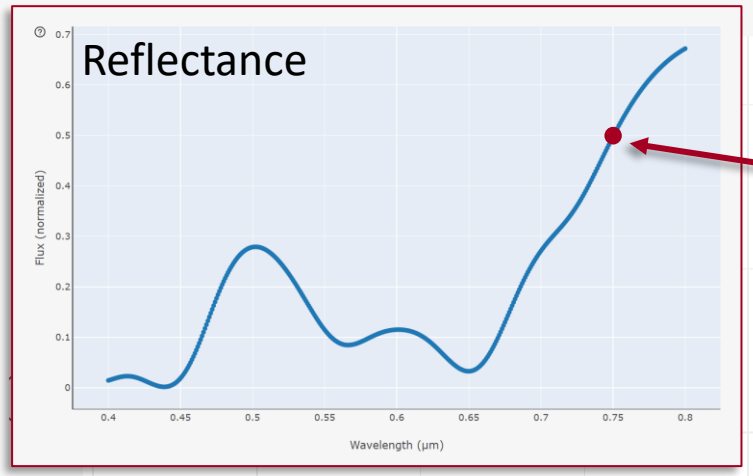
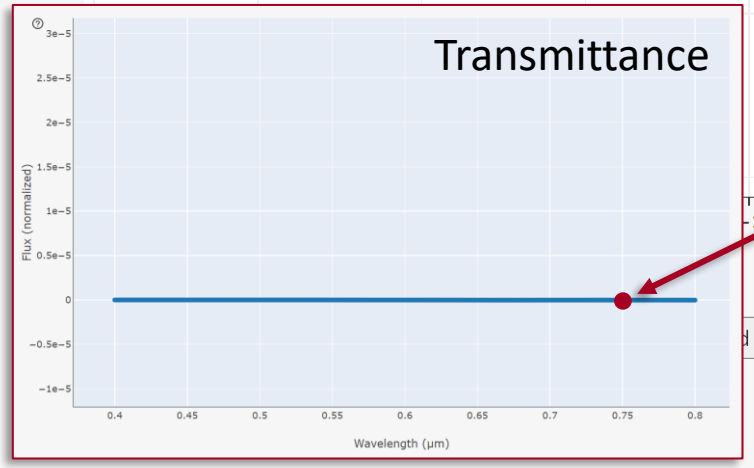
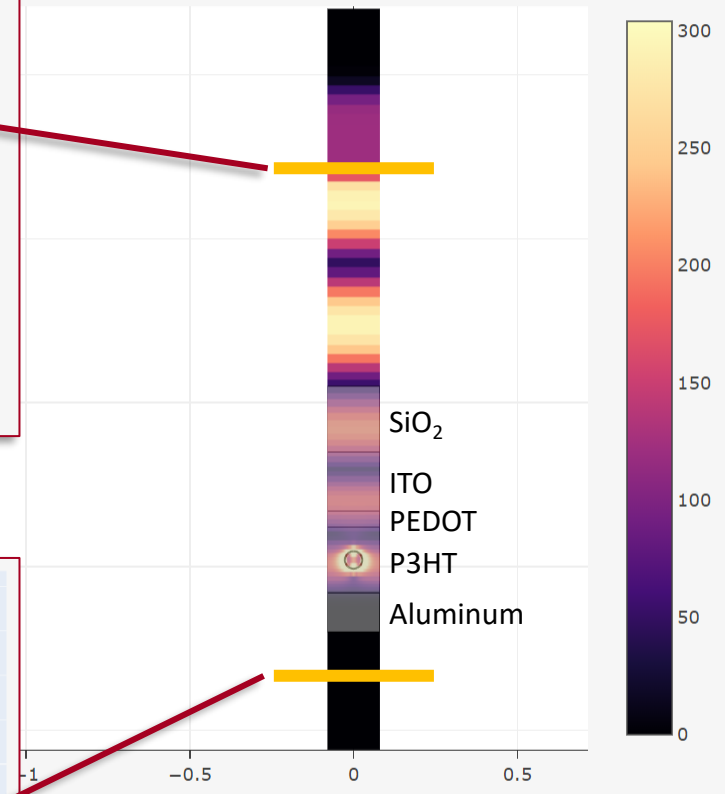
Shutoff Condition
Show More

STRUCTURES
SOURCES
MONITORS
transmittance
reflectance
field_xz
SCRIPT OBJECTS

3D Chart 2D Chart Post-Run Result Beta Task Details Edit







Data

Result Advanced Beta

Monitor Name
field_xz

Type: FieldMonitor

Field Component
E

Value to Plot
Magnitude (abs)

Y Position (μm)
0

Frequency Wavelength THz
399.7232870506853

Use equal axis aspect ratio
Overlay with structure
Color Scale

Simulation Parameter

STUDIES
FDTD draft

Editor

CONFIGURATION
Simulation Domain
Run Time
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Boundary and Symm
Shutoff Condition
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STRUCTURES
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SOURCES
MONITORS
SCRIPT OBJECTS

Boundary and Symmetry

Boundary Condition Help

x
Periodic
Periodic
y
Periodic
Periodic
PML
PML

Symmetry Help

x
No symmetry
y
No symmetry
z
No symmetry

Apply

hart 2D Chart Task Details Run Validation pass

Unit Cell

Visibility

Axes
Ruler
Simulation Domain
Sources(1/1)
Monitors(2/3)
Structures(6/7)
SiO2
ITO
PEDOT
P3HT
Al
ITO_Coating
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Simulation Parameter

STUDIES
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SOURCES
MONITORS
SCRIPT OBJECTS

Boundary and Symmetry

Boundary Condition Help

x
Periodic
Periodic

y
Periodic
Periodic

z
PML
PML

Symmetry Help

x
No symmetry

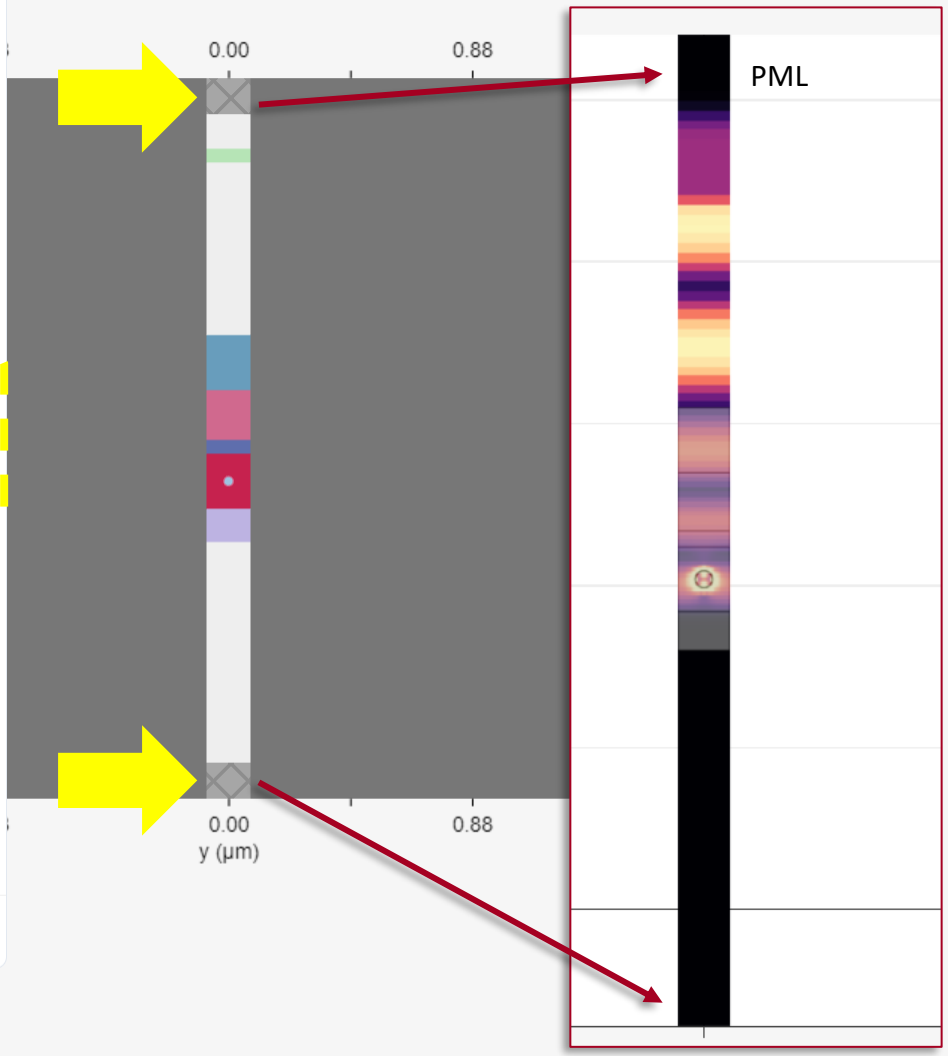
y
No symmetry

z
No symmetry

Apply

hart 2D Chart Task Details Run

Validation pass



Plot Setting

X Y Z

0

Visual Thickness of Plane

0.05

Show grid
Show sources
Show monitors
Show structure border
Plot permittivity

Measure

Simulation Parameter

STUDIES
FDTD draft

Editor

CONFIGURATION
Simulation Domain
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Al
ITO_Coating
Au_Nanosphere

SOURCES

MONITORS
transmittance
reflectance
field_xz

SCRIPT OBJECTS

Boundary and Symmetry

Boundary Condition Help

x
Periodic
Periodic

y
Periodic
Periodic

z
PECBoundary
PML

Symmetry Help

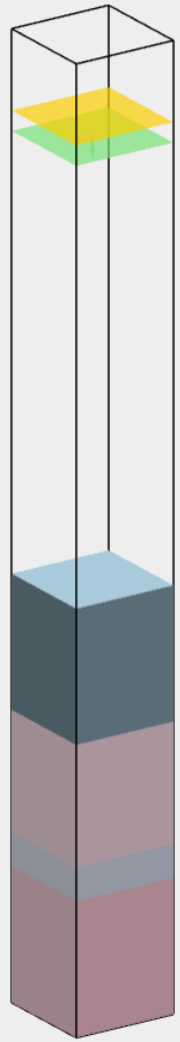
x
No symmetry

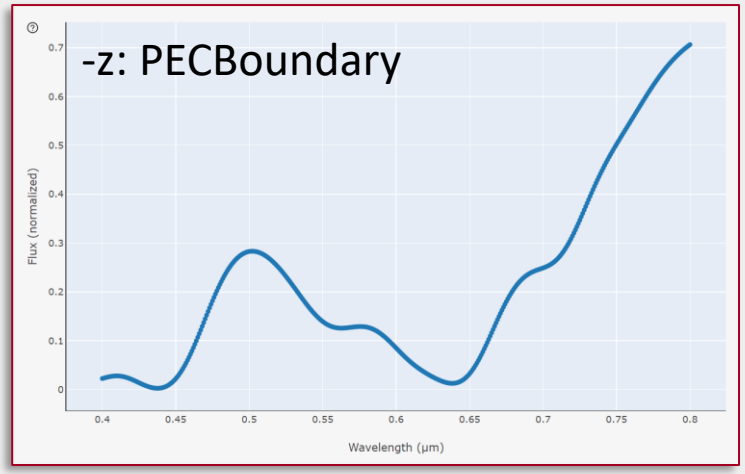
y
No symmetry

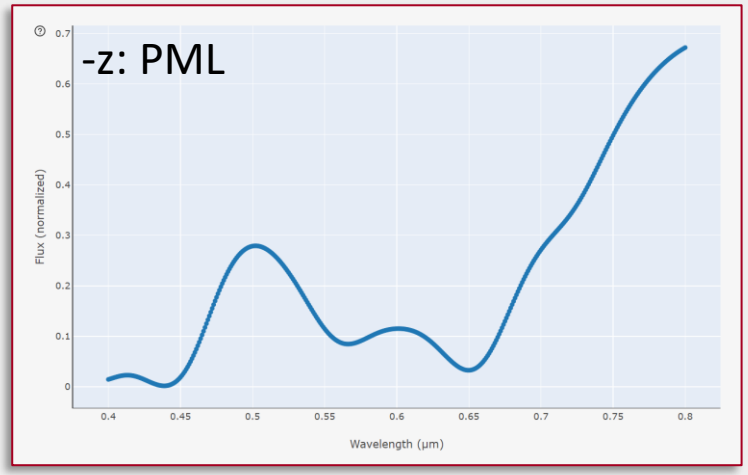
z
No symmetry

Apply

hart 2D Chart Task Details Run Validation pass







Visibility
Axes
Ruler
Simulation Domain
Sources(1/1)
Monitors(1/2)
Structures(6/6)
SiO2
ITO
PEDOT
P3HT
ITO_Coating
Au_Nanosphere

Simulation Parameter

STUDIES
FDTD success

Editor

CONFIGURATION
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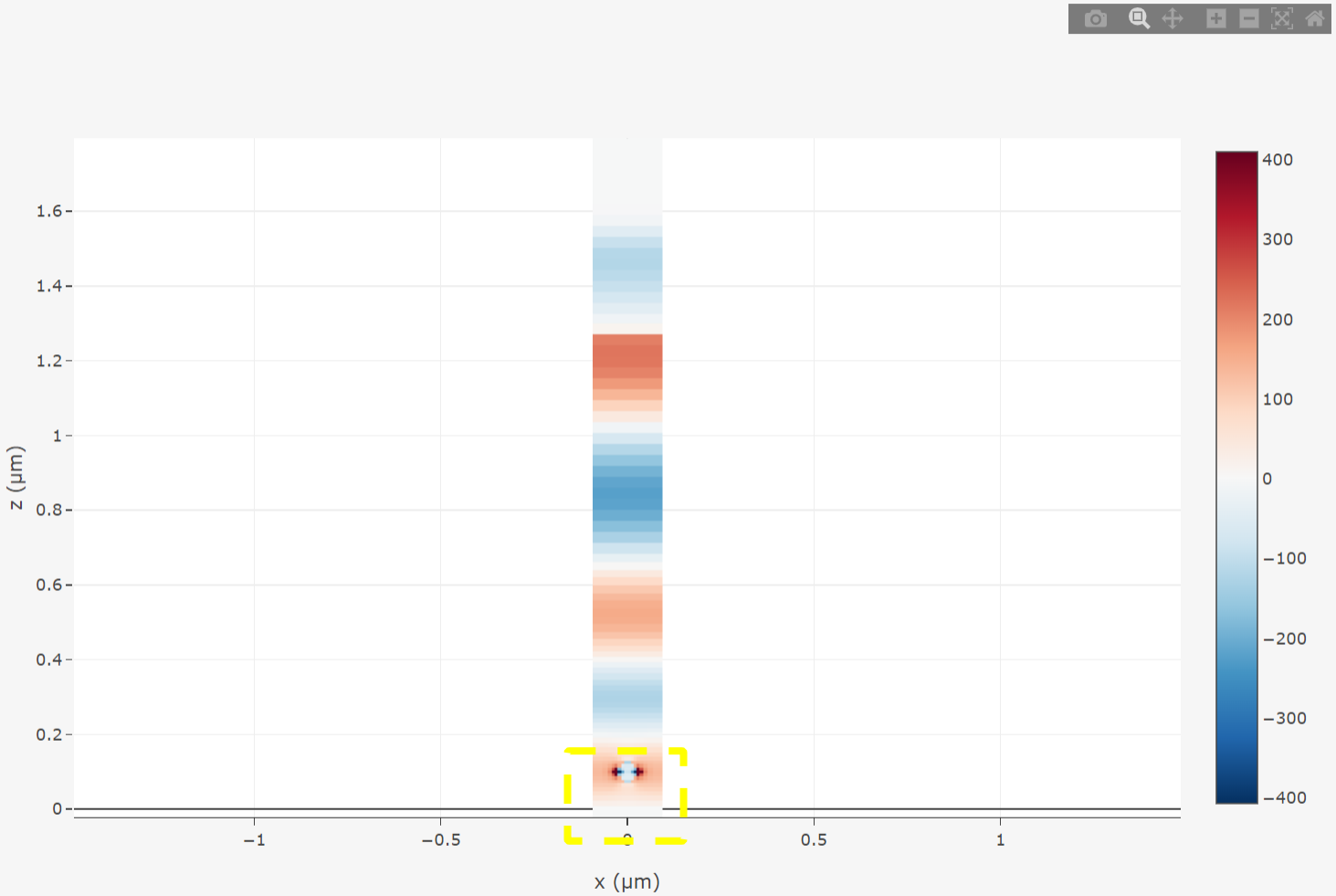
ITO_Coating
Au_Nanosphere

SOURCES

MONITORS
transmittance
reflectance
field_xz

SCRIPT OBJECTS

3D Chart 2D Chart Post-Run Result Beta Task Details Edit



Download Data

Result Advanced Beta

Monitor Name
field_xz

Type: FieldMonitor

Field Component
Ex

Value to Plot
Real

Y Position (μm)
0

Frequency Wavelength THz
399.7232870506853

Use equal axis aspect ratio
Overlay with structure
Color Scale

Simulation Parameter

STUDIES
FDTD draft

Editor

CONFIGURATION
Simulation Domain
Run Time
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Boundary and Symmetry
Shutoff Condition
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STRUCTURES
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ITO
PEDOT
P3HT
Al
ITO_Coating
Au_Nanosphere

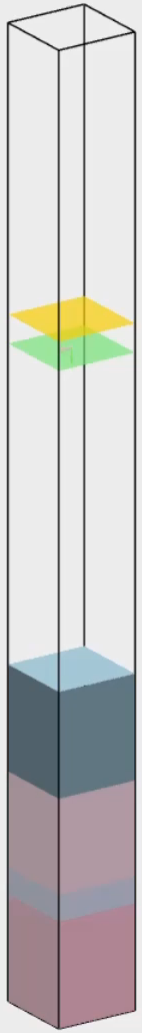
SOURCES
plane_wave

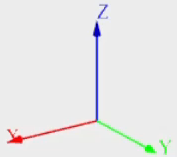
MONITORS
transmittance
reflectance
field_xz

SCRIPT OBJECTS

3D Chart 2D Chart Task Details Run

Validation pass





Visibility

Axes
Ruler
Simulation Domain
Sources(1/1)
Monitors(1/2)
Structures(6/6)
SiO2
ITO
PEDOT
P3HT
ITO_Coating
Au_Nanosphere

Simulation Parameter

STUDIES
FDTD draft

Editor

CONFIGURATION
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STRUCTURES
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PEDOT
P3HT
Al
ITO_Coating
Au_Nanosphere

SOURCES
plane_wave

MONITORS
transmittance
reflectance
field_xz

SCRIPT OBJECTS

Boundary and Symmetry

Boundary Condition Help

x
BlochBoundary
BlochBoundary

y
BlochBoundary
BlochBoundary

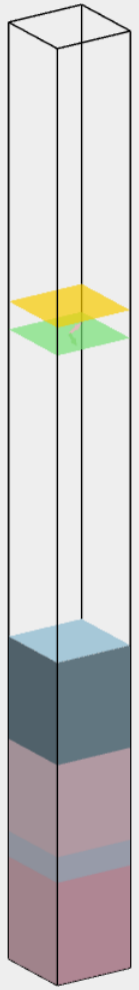
z
PECBoundary
Absorber

Periodic
PECBoundary
PMCBoundary
PML
StablePML
Absorber
BlochBoundary

Apply

hart 2D Chart Task Details Run

Validation pass



Visibility

Axes
Ruler
Simulation Domain
Sources(1/1)
Monitors(1/2)
Structures(6/6)
SiO2
ITO
PEDOT
P3HT
ITO_Coating
Au_Nanosphere