

IR	Simulation	Fabry Perot	Cavity	Meta-material
Wave-length	Optical	Skin depth	Theory	Mode
TE	Period	Free Space	EOT	Electric
Freq- uency	Thick- ness	RCWA	Wave- guide	Floquet
Boundary	Cylind- rical	Energy	Fields	Trans- mission

Optical	EOT	Reso- nance	RCWA	PEC
Simu- lation	Cavity	Energy	Freq- uency	Electric
Wave- guide	Wave- length	Free Space	ECR	Surface
Radius	Refl- ection	Period	Metal	Floquet
Fabry Perot	Cylind- rical	IR	TE	Trans- mission

Electric	Cylind- rical	RCWA	Reso- nance	Fabry Perot
Optical	Freq- uency	Refl- ection	Simu- lation	Trans- mission
ECR	Metal	Free Space	Die- lectric	Fields
Floquet	TM	Theory	EOT	Rectang- ular
Period	BC	Energy	Aperture	Cavity

Energy	Wave- guide	Floquet	Refl- ection	Reso- nance
Thick- ness	Skin depth	Optical	Theory	Magnetic
Die- lectric	Period	Free Space	Fabry Perot	Cavity
TE	Simu- lation	Fields	RCWA	Electric
Aperture	Trans- mission	TM	PEC	Metal

RCWA	Meta-material	Freq- uency	Radius	Period
Mode	Wave-length	Wave-guide	Fabry Perot	Boundary
EOT	Reso-nance	Free Space	PEC	Energy
Cylind- rical	Metal	Magnetic	BC	Simu- lation
TM	Surface	Floquet	Theory	Trans- mission

Wave-length	EOT	PEC	Fields	Wave-guide
Cylind- rical	Cavity	Surface	Energy	Skin depth
Plasmon	IR	Free Space	Simu- lation	Die- lectric
Reso-nance	Theory	Mode	RCWA	TM
TE	Period	Magnetic	BC	Thick- ness

ECR	EOT	Skin depth	PEC	Reflection
Resonance	Frequency	Thickness	Rectangular	Surface
Dielectric	Cylindrical	Free Space	Magnetic	Fields
Transmission	Boundary	Plasmon	BC	TM
Wavelength	Waveguide	Cavity	Energy	Period

RCWA	TE	Floquet	Metal	BC
PEC	Energy	Electric	Frequency	Resonance
Theory	Rectangular	Free Space	Fields	Boundary
Reflection	Plasmon	Magnetic	TM	Surface
ECR	Radius	Cylindrical	Mode	Dielectric

PEC	Fields	Reso- nance	Refl- ection	BC
Boundary	Metal	Skin depth	Optical	Cylind- rical
Plasmon	Period	Free Space	Rectang- ular	TE
Thick- ness	Electric	Radius	Mode	ECR
Floquet	Wave- guide	EOT	TM	Theory

Mode	Radius	Refl- ection	BC	Trans- mission
Electric	Aperture	Metal	Meta- material	Theory
IR	Floquet	Free Space	Wave- guide	Reso- nance
EOT	Rectang- ular	TM	Boundary	Skin depth
Surface	Cavity	ECR	PEC	Optical

Metal	Energy	Skin depth	Magnetic	Transmission
Rectangular	Resonance	Aperture	Theory	Surface
PEC	TM	Free Space	ECR	Metamaterial
TE	Dielectric	Wavelength	Electric	EOT
Cylindrical	Reflection	Period	Floquet	Waveguide

Rectangular	RCWA	Plasmon	Cavity	PEC
TM	Cylindrical	Resonance	Energy	EOT
Wavelength	Transmission	Free Space	Waveguide	Electric
Simulation	Theory	Aperture	Dielectric	Surface
BC	Magnetic	Metal	Fields	Optical

13

Boundary	Metal	Freq– uency	Mode	Electric
Reso– nance	Fabry Perot	IR	Energy	Thick– ness
Rectang– ular	Surface	Free Space	Period	Wave– guide
EOT	Magnetic	TM	Trans– mission	Die– lectric
Optical	Plasmon	PEC	Radius	Skin depth

14

Wave– guide	Simu– lation	Boundary	TM	RCWA
Cavity	Thick– ness	Skin depth	Cylind– rical	Floquet
Plasmon	Fields	Free Space	TE	Meta– material
Fabry Perot	IR	Theory	EOT	Die– lectric
Rectang– ular	Electric	Reso– nance	BC	Refl– ection

15

Mode	Energy	Boundary	Electric	Cavity
Period	Fields	Thick- ness	Theory	PEC
Aperture	Refl- ection	Free Space	Meta- material	Radius
Magnetic	Metal	EOT	Optical	Trans- mission
IR	BC	Wave- length	Fabry Perot	Rectang- ular

16

Die- lectric	Metal	Meta- material	BC	Freq- uency
Floquet	Magnetic	Cylind- rical	TE	EOT
Trans- mission	Radius	Free Space	Cavity	Period
Skin depth	TM	Optical	Refl- ection	Plasmon
IR	Surface	PEC	Wave- guide	Fields

17

EOT	Trans- mission	ECR	Theory	Skin depth
Optical	Refl- ection	Aperture	PEC	Fabry Perot
Metal	Plasmon	Free Space	TE	RCWA
Simu- lation	Thick- ness	Magnetic	Die- lectric	Wave- guide
Cavity	Energy	BC	Fields	Wave- length

18

Mode	Fields	Energy	Cavity	TM
Reso- nance	Wave- guide	Optical	Meta- material	Refl- ection
Cylind- rical	Magnetic	Free Space	BC	Rectang- ular
IR	Boundary	Thick- ness	TE	ECR
Wave- length	Simu- lation	PEC	Theory	EOT

19

Reso- nance	Aperture	Wave- guide	RCWA	Die- lectric
Plasmon	Wave- length	Period	Rectang- ular	Fields
Simu- lation	Theory	Free Space	Boundary	Magnetic
TM	IR	BC	Freq- uency	Refl- ection
EOT	Fabry Perot	Floquet	Mode	Optical

20

BC	Cylind- rical	IR	Trans- mission	Optical
Wave- guide	Magnetic	Radius	Refl- ection	EOT
PEC	Floquet	Free Space	Meta- material	Skin depth
Period	Plasmon	Rectang- ular	Freq- uency	Theory
Reso- nance	Fields	ECR	Cavity	Thick- ness

21

Reso- nance	RCWA	Skin depth	Wave- guide	Floquet
Mode	Trans- mission	Optical	Magnetic	BC
Fabry Perot	Meta- material	Free Space	Metal	Die- lectric
Theory	EOT	Aperture	TE	Boundary
PEC	Refl- ection	ECR	IR	Surface

22

Simu- lation	Skin depth	RCWA	Refl- ection	Fields
Energy	Wave- length	BC	Freq- uency	Electric
Thick- ness	Theory	Free Space	Optical	Boundary
Plasmon	TM	Aperture	Period	ECR
PEC	Mode	Cavity	Magnetic	Metal

23

Trans- mission	RCWA	Reso- nance	Simu- lation	Theory
Metal	Boundary	Cavity	Fields	Wave- length
Meta- material	Thick- ness	Free Space	Die- lectric	Wave- guide
Surface	Electric	ECR	Cylind- rical	TE
Plasmon	Refl- ection	Optical	Radius	Rectang- ular

24

Magnetic	IR	Freq- uency	Trans- mission	Refl- ection
Period	Energy	BC	TM	RCWA
Wave- guide	Metal	Free Space	Fields	Cavity
Plasmon	Electric	PEC	Theory	EOT
Reso- nance	Thick- ness	Skin depth	Surface	Mode

25

RCWA	Thick- ness	Die- lectric	Energy	IR
Skin depth	Boundary	Radius	Cavity	Surface
Metal	Aperture	Free Space	Electric	Wave- guide
Plasmon	Magnetic	PEC	Refl- ection	Trans- mission
Fields	BC	Simu- lation	Wave- length	Period

26

Trans- mission	Die- lectric	Wave- length	Simu- lation	Thick- ness
Fabry Perot	Magnetic	Theory	Boundary	Optical
Period	Surface	Free Space	Cavity	Refl- ection
EOT	Wave- guide	PEC	Skin depth	Fields
RCWA	IR	ECR	Aperture	Metal

27

Plasmon	RCWA	Metal	Floquet	Boundary
Dielectric	Rectangular	Transmission	Fields	Energy
TM	TE	Free Space	Simulation	Mode
Electric	Cavity	ECR	Aperture	Metamaterial
Cylindrical	IR	Optical	Wavelength	Fabry Perot

28

Theory	Magnetic	EOT	Reflection	Simulation
Skin depth	Cavity	Frequency	Fabry Perot	Aperture
Fields	Boundary	Free Space	Period	Rectangular
Surface	Cylindrical	IR	Floquet	Plasmon
Energy	Thickness	Mode	TE	Radius

29

Mode	Optical	TE	Radius	RCWA
Cylindrical	EOT	ECR	Meta-material	Skin depth
Resonance	Floquet	Free Space	Period	BC
TM	Reflection	Aperture	Fabry Perot	Metal
Theory	PEC	Frequency	Thickness	Dielectric

30

Rectangular	Aperture	Wavelength	Theory	Thickness
Metal	Waveguide	Optical	Mode	Surface
Boundary	Magnetic	Free Space	Cylindrical	EOT
Skin depth	Reflection	Radius	PEC	Fields
Meta-material	Floquet	RCWA	Frequency	IR

31

IR	Theory	EOT	Radius	TM
Reflection	TE	Aperture	Skin depth	Thickness
Wavelength	Electric	Free Space	Mode	RCWA
Frequency	Cavity	Fabry Perot	Magnetic	Dielectric
Resonance	Optical	Surface	Period	Plasmon

32

Reflection	Period	Boundary	Rectangular	EOT
Cavity	Fabry Perot	Cylindrical	TE	Wavelength
Radius	Optical	Free Space	Dielectric	Magnetic
Simulation	Surface	Skin depth	Transmission	TM
Resonance	RCWA	Aperture	Energy	PEC

33

Boundary	EOT	PEC	TE	Radius
Freq– uency	Wave– guide	Mode	Plasmon	Skin depth
Reso– nance	Refl– ection	Free Space	Fields	Thick– ness
ECR	Trans– mission	Aperture	Floquet	Theory
Wave– length	Optical	Rectang– ular	Simu– lation	Surface

34

Radius	Mode	Trans– mission	Reso– nance	Wave– length
IR	Surface	Fields	Rectang– ular	Cavity
Meta– material	Boundary	Free Space	Aperture	Skin depth
Period	Die– lectric	Fabry Perot	ECR	BC
TE	RCWA	Refl– ection	Thick– ness	TM

35

IR	Theory	TM	TE	Mode
Trans- mission	Fabry Perot	ECR	Freq- uency	Rectang- ular
Floquet	Wave- guide	Free Space	EOT	Surface
Radius	Energy	Cavity	Boundary	Wave- length
Cylind- rical	BC	Aperture	Thick- ness	Metal

36

Skin depth	Magnetic	Freq- uency	Radius	Cavity
Meta- material	Wave- length	PEC	Cylind- rical	Fields
Wave- guide	Rectang- ular	Free Space	Surface	Period
TE	Electric	EOT	Energy	Plasmon
Theory	RCWA	Trans- mission	Reso- nance	BC

37

Simulation	EOT	Electric	PEC	Reflection
Fabry Perot	Wavelength	Energy	Plasmon	Thickness
Magnetic	Rectangular	Free Space	Metal	ECR
RCWA	Transmission	Period	Meta-material	Surface
Frequency	Radius	TE	BC	TM

38

TM	Rectangular	Floquet	RCWA	Plasmon
Magnetic	IR	EOT	Waveguide	Optical
ECR	Thickness	Free Space	Surface	Fabry Perot
Mode	Reflection	Fields	Radius	BC
Theory	Transmission	Skin depth	Energy	Simulation

39

Aperture	IR	Fields	Surface	EOT
Energy	Radius	Period	Reso- nance	PEC
Floquet	TM	Free Space	Die- lectric	Mode
Boundary	Rectang- ular	Meta- material	Theory	Skin depth
Thick- ness	Optical	Plasmon	BC	Cylind- rical

40

Trans- mission	Refl- ection	Magnetic	RCWA	Electric
ECR	Cavity	Reso- nance	Floquet	Optical
Cylind- rical	Meta- material	Free Space	Energy	Wave- length
Aperture	TE	Metal	Wave- guide	BC
Freq- uency	Plasmon	Period	Skin depth	Fields

41

Cavity	Boundary	PEC	Rectang- ular	BC
Skin depth	Refl- ection	Energy	TM	Magnetic
Die- lectric	Trans- mission	Free Space	EOT	TE
Radius	Period	Metal	Aperture	Plasmon
Fields	Thick- ness	Freq- uency	Meta- material	Wave- length

42

Surface	Wave- length	BC	Radius	Fields
Meta- material	Mode	Electric	Plasmon	TE
Metal	Simu- lation	Free Space	RCWA	Thick- ness
Theory	EOT	Cavity	Period	Aperture
Reso- nance	Energy	Skin depth	Optical	Refl- ection

43

Waveguide	Cylindrical	Fields	Transmission	Rectangular
Metal	BC	ECR	IR	Aperture
Thickness	Frequency	Free Space	Cavity	PEC
Skin depth	Fabry Perot	Boundary	Optical	Surface
Mode	EOT	Dielectric	Energy	Period

44

Waveguide	Fields	Theory	ECR	TM
IR	EOT	Dielectric	RCWA	Wavelength
Energy	Fabry Perot	Free Space	Period	Simulation
TE	BC	Optical	Resonance	Plasmon
Mode	Surface	Floquet	Frequency	Metamaterial

45

TM	Metal	Theory	Meta-material	EOT
TE	Surface	Transmission	Dielectric	Period
Optical	Cavity	Free Space	Skin depth	RCWA
Mode	Aperture	BC	Fabry Perot	Frequency
Resonance	Fields	ECR	Radius	Plasmon

46

Fabry Perot	EOT	Metal	Surface	Electric
RCWA	Cylindrical	ECR	Plasmon	Skin depth
Cavity	BC	Free Space	Energy	Boundary
TM	Dielectric	Floquet	Waveguide	Reflection
TE	Resonance	Wavelength	IR	Frequency

47

Mode	Magnetic	Floquet	Energy	ECR
Theory	Wave-length	Thick-ness	Rectang-ular	Meta-material
PEC	Refl-ection	Free Space	Optical	Electric
TE	EOT	Aperture	Fields	Wave-guide
Skin depth	Period	Cavity	TM	Boundary

48

Plasmon	Radius	Wave-guide	Mode	Period
TE	Freq-uity	EOT	TM	Cylind-ric
Magnetic	Fields	Free Space	BC	IR
Thick-ness	Meta-material	Refl-ection	Metal	Electric
Rectang-ular	Boundary	Die-lectric	Aperture	Floquet

49

Radius	PEC	RCWA	Thick- ness	Wave- length
Cylind- rical	Floquet	Boundary	IR	Freq- uency
Skin depth	Trans- mission	Free Space	Refl- ection	Rectang- ular
Reso- nance	TM	ECR	Magnetic	Electric
Simu- lation	Meta- material	Fabry Perot	Die- lectric	Wave- guide

50

Surface	TM	Wave- length	IR	Reso- nance
Energy	EOT	Die- lectric	Radius	TE
RCWA	Electric	Free Space	Wave- guide	Fabry Perot
Period	BC	Floquet	Trans- mission	Refl- ection
Aperture	Cavity	Cylind- rical	Optical	Magnetic

51

Refl- ection	Radius	BC	Magnetic	Cylind- rical
Theory	PEC	Wave- length	Metal	Aperture
Cavity	Mode	Free Space	Trans- mission	RCWA
Surface	TM	TE	Wave- guide	Floquet
Die- lectric	Fields	Period	Freq- uency	Simu- lation

52

Cylind- rical	Fields	IR	Electric	Cavity
TM	Aperture	Wave- length	Die- lectric	Energy
Thick- ness	BC	Free Space	Reso- nance	Radius
Trans- mission	Freq- uency	Wave- guide	Theory	TE
Mode	ECR	Surface	Meta- material	Plasmon

53

Rectang-ular	Cavity	Energy	Aperture	Wave-length
BC	Metal	Theory	TM	Period
Floquet	Magnetic	Free Space	Die-lectric	Refl-ection
Reso-nance	Optical	ECR	Fabry Perot	Surface
Wave-guide	Thick-ness	PEC	EOT	IR

54

TE	Rectang-ular	Electric	Floquet	Wave-length
Energy	EOT	IR	Surface	Meta-material
Refl-ection	Cylind-rical	Free Space	Cavity	Metal
Trans-mission	Simu-lation	RCWA	TM	BC
Reso-nance	Aperture	Fields	Theory	Fabry Perot

55

EOT	Cylind- rical	IR	Plasmon	Rectang- ular
Die- lectric	Refl- ection	Trans- mission	Fields	Optical
Theory	Boundary	Free Space	Wave- guide	Reso- nance
Magnetic	Thick- ness	TM	Wave- length	Metal
Floquet	Skin depth	RCWA	Radius	Mode

56

Floquet	Wave- length	Freq- uency	Cylind- rical	RCWA
Optical	Period	Theory	BC	Trans- mission
Refl- ection	Cavity	Free Space	Simu- lation	ECR
Rectang- ular	Magnetic	Energy	Electric	PEC
Boundary	Mode	Thick- ness	TE	Die- lectric

57

Die- lectric	Optical	Trans- mission	Radius	Fields
Aperture	Magnetic	Fabry Perot	Skin depth	Mode
Reso- nance	TE	Free Space	Electric	ECR
Freq- uency	Metal	EOT	Boundary	Theory
IR	BC	Cavity	Energy	PEC

58

Aperture	EOT	Cavity	Period	Theory
Optical	Cylind- rical	Electric	Surface	RCWA
Freq- uency	Fields	Free Space	IR	Wave- guide
Wave- length	Metal	ECR	Die- lectric	Thick- ness
Magnetic	Energy	BC	Rectang- ular	Plasmon

59

Theory	Reso- nance	Trans- mission	Energy	Skin depth
PEC	Electric	Magnetic	Floquet	Cavity
Aperture	Plasmon	Free Space	Freq- uency	EOT
TE	IR	Simu- lation	Meta- material	Fabry Perot
Thick- ness	ECR	Rectang- ular	Mode	Fields

60

Cylind- rical	Period	Rectang- ular	Die- lectric	Aperture
Refl- ection	Optical	TE	Energy	PEC
RCWA	Fields	Free Space	Magnetic	Simu- lation
Freq- uency	EOT	Boundary	Mode	Wave- length
Surface	Theory	Meta- material	Cavity	Metal

61

Magnetic	Cylindrical	Radius	Frequency	TE
Fields	Reflection	Period	Metal	Plasmon
Theory	Wavelength	Free Space	Skin depth	IR
Floquet	BC	Optical	EOT	Electric
Energy	Transmission	Rectangular	Cavity	Aperture

62

Cavity	Thickness	Magnetic	Fabry Perot	Waveguide
ECR	Optical	Fields	EOT	Metal
Resonance	Transmission	Free Space	Floquet	Boundary
IR	TM	Mode	RCWA	PEC
Aperture	Radius	Frequency	Cylindrical	Reflection

63

Cavity	RCWA	Reflection	Mode	Energy
Skin depth	Floquet	Thickness	Waveguide	Frequency
Dielectric	Surface	Free Space	TE	Resonance
ECR	Plasmon	Wavelength	Magnetic	Period
Meta-material	Cylindrical	TM	Electric	Radius

64

Frequency	IR	Meta-material	PEC	Surface
BC	Simulation	Cylindrical	Theory	Thickness
RCWA	TE	Free Space	Resonance	Period
Rectangular	Mode	Energy	Dielectric	Aperture
Wavelength	Skin depth	Magnetic	Fabry Perot	Waveguide

65

BC	RCWA	Magnetic	Meta-material	Skin depth
Reflection	Fields	TE	Dielectric	Mode
Surface	Energy	Free Space	Plasmon	Period
Optical	Transmission	EOT	Fabry Perot	Simulation
Waveguide	Wavelength	TM	Cylindrical	IR

66

Surface	Energy	Fields	EOT	TE
Simulation	Wavelength	Plasmon	Theory	Waveguide
PEC	Mode	Free Space	Reflection	Dielectric
TM	Cavity	Meta-material	Radius	Resonance
RCWA	Electric	Frequency	ECR	Boundary

67

Fabry Perot	Energy	Boundary	RCWA	Cavity
Meta-material	Period	EOT	Refl- ection	Thick- ness
PEC	Freq- uency	Free Space	Skin depth	BC
Surface	Trans- mission	Fields	Plasmon	Floquet
Optical	Metal	Wave- length	ECR	Radius

68

Meta-material	TM	IR	Magnetic	Trans- mission
Boundary	Period	Reso- nance	Cylind- rical	Simu- lation
Freq- uency	Aperture	Free Space	Wave- length	RCWA
EOT	Theory	Energy	Surface	Optical
Fabry Perot	Wave- guide	Refl- ection	Mode	TE

69

Radius	RCWA	Boundary	Theory	Electric
Fields	Metal	Plasmon	Reso- nance	Period
Magnetic	Wave- length	Free Space	Wave- guide	Rectang- ular
ECR	TM	Cylind- rical	Refl- ection	Die- lectric
EOT	Aperture	Thick- ness	Surface	Trans- mission

70

Freq- uency	Wave- guide	Metal	Period	ECR
Cylind- rical	Mode	Reso- nance	TE	Boundary
Meta- material	Energy	Free Space	Theory	Skin depth
Surface	Floquet	Optical	Rectang- ular	EOT
Refl- ection	Trans- mission	Simu- lation	Fabry Perot	Radius

71

Meta-material	Wave-guide	Simu-lation	Surface	TM
Refl-ection	Radius	Cavity	Skin depth	Fields
Thick-ness	Boundary	Free Space	ECR	Theory
Trans-mission	Reso-nance	Period	Floquet	Freq-uity
BC	Cylind-ric	Mode	PEC	Energy

72

TM	Wave-guide	Freq-uity	Cylind-ric	Surface
Die-lectric	Metal	Aperture	Fabry Perot	Radius
RCWA	BC	Free Space	Fields	ECR
Cavity	Plasmon	Skin depth	Theory	Simu-lation
TE	Reso-nance	Thick-ness	Magnetic	Trans-mission

73

Floquet	TE	Energy	Die- lectric	Radius
Fields	Surface	BC	Refl- ection	Skin depth
Metal	ECR	Free Space	Thick- ness	Plasmon
Aperture	Period	TM	Magnetic	Cylind- rical
Meta- material	Cavity	Reso- nance	Simu- lation	IR

74

Magnetic	RCWA	Radius	Thick- ness	Electric
Surface	Refl- ection	Metal	Trans- mission	Cavity
Cylind- rical	PEC	Free Space	Optical	Wave- guide
Fabry Perot	Mode	Die- lectric	Floquet	Period
Boundary	Simu- lation	Meta- material	Reso- nance	EOT

75

Floquet	TM	Cavity	Surface	Mode
Period	TE	Fields	IR	Simulation
Plasmon	Rectangular	Free Space	PEC	RCWA
Radius	Resonance	Aperture	Transmission	Boundary
Waveguide	ECR	Energy	Wavelength	Metal

76

Transmission	Optical	Simulation	Cylindrical	Boundary
Reflection	Fabry Perot	Frequency	Dielectric	Floquet
Thickness	PEC	Free Space	Skin depth	Wavelength
Theory	Fields	Resonance	Magnetic	Plasmon
Radius	Rectangular	Mode	ECR	Aperture

77

RCWA	Simulation	Electric	Frequency	Cylindrical
Boundary	Cavity	Optical	Surface	PEC
Theory	Meta-material	Free Space	Thickness	BC
TM	Rectangular	Energy	Transmission	Dielectric
EOT	Period	IR	Radius	Wavelength

78

Floquet	Radius	PEC	Surface	Wavelength
Waveguide	Aperture	Theory	RCWA	Boundary
Electric	Fields	Free Space	TM	Dielectric
Period	BC	Optical	Energy	Simulation
Rectangular	Cylindrical	Thickness	EOT	Cavity

79

Rectang- ular	Simu- lation	Thick- ness	Skin depth	ECR
Radius	Theory	Trans- mission	Electric	Meta- material
TM	Cylind- rical	Free Space	Die- lectric	Surface
Plasmon	Floquet	Fields	EOT	Optical
Refl- ection	Magnetic	Period	Reso- nance	RCWA

80

Meta- material	Period	Wave- guide	Wave- length	Fabry Perot
Plasmon	Refl- ection	Freq- uency	Simu- lation	Rectang- ular
Skin depth	TM	Free Space	Electric	PEC
BC	Magnetic	RCWA	TE	Radius
Trans- mission	Fields	Boundary	Optical	Aperture

81

Plasmon	Skin depth	Dielectric	TM	ECR
Reflection	Period	RCWA	Optical	Simulation
Thickness	PEC	Free Space	Radius	Floquet
EOT	Boundary	Metamaterial	Electric	IR
Magnetic	Theory	Transmission	Cavity	Energy

82

Transmission	Surface	TM	Plasmon	Wavelength
Waveguide	IR	Metamaterial	Electric	TE
Mode	Cylindrical	Free Space	PEC	Period
Reflection	ECR	Boundary	Fabry Perot	Cavity
Dielectric	Magnetic	Rectangular	Thickness	Radius

83

Thick- ness	Mode	Floquet	Plasmon	TE
Trans- mission	Wave- guide	ECR	Magnetic	TM
Reso- nance	Wave- length	Free Space	Boundary	Rectang- ular
Metal	Freq- uency	IR	Period	Fields
Aperture	Refl- ection	Theory	Energy	BC

84

Optical	Fields	Meta- material	Aperture	Freq- uency
Wave- length	Thick- ness	Refl- ection	Theory	Floquet
Rectang- ular	Magnetic	Free Space	Skin depth	Wave- guide
RCWA	Boundary	Electric	Cavity	EOT
Die- lectric	Period	Trans- mission	Simu- lation	TM

85

Trans- mission	Thick- ness	EOT	ECR	Surface
Die- lectric	Electric	Energy	Theory	Reso- nance
Cylind- rical	Wave- length	Free Space	Plasmon	Period
Mode	RCWA	Aperture	Floquet	PEC
Optical	IR	Refl- ection	Simu- lation	Radius

86

Period	Reso- nance	Fabry Perot	Simu- lation	Refl- ection
Trans- mission	Surface	Electric	Mode	Radius
BC	Fields	Free Space	IR	Freq- uency
Metal	TE	Optical	Boundary	Thick- ness
Wave- length	Meta- material	TM	Rectang- ular	Cylind- rical

87

PEC	Die- lectric	Simu- lation	EOT	Reso- nance
Boundary	Aperture	Refl- ection	RCWA	TM
Surface	BC	Free Space	Thick- ness	Period
Trans- mission	Theory	Freq- uency	ECR	Electric
Plasmon	Fabry Perot	Skin depth	IR	Energy

88

Metal	RCWA	Aperture	Theory	Die- lectric
EOT	PEC	Plasmon	Optical	Surface
Cylind- rical	Fabry Perot	Free Space	Meta- material	Refl- ection
Simu- lation	TE	Radius	BC	Cavity
Electric	Period	Wave- length	TM	Floquet

89

RCWA	Radius	Rectang- ular	Skin depth	Electric
Cylind- rical	Die- lectric	Freq- uency	TE	Floquet
Meta- material	Optical	Free Space	Wave- length	IR
Surface	TM	Fabry Perot	PEC	Mode
Boundary	Simu- lation	Refl- ection	Reso- nance	Energy

90

Surface	Simu- lation	Cavity	TE	Optical
Freq- uency	Cylind- rical	Rectang- ular	Reso- nance	Plasmon
Energy	Trans- mission	Free Space	TM	Die- lectric
Thick- ness	Radius	ECR	Wave- guide	Magnetic
EOT	RCWA	Mode	Refl- ection	Floquet

91

Radius	Meta-material	Freq- uency	Aperture	Cylind- rical
Plasmon	Thick- ness	Electric	TM	Metal
PEC	Period	Free Space	IR	BC
EOT	Skin depth	Surface	RCWA	Rectang- ular
ECR	Energy	Optical	Fields	Trans- mission

92

ECR	IR	Theory	Wave- guide	Fields
EOT	Refl- ection	BC	Energy	Electric
Skin depth	Radius	Free Space	Cavity	Simu- lation
Metal	Aperture	Rectang- ular	Floquet	TM
Boundary	Freq- uency	Magnetic	TE	Reso- nance

93

TM	BC	EOT	Rectang- ular	RCWA
Metal	Aperture	Surface	Reso- nance	PEC
Electric	Fields	Free Space	Radius	TE
Meta- material	Optical	Mode	Wave- guide	Energy
Trans- mission	Cavity	IR	Cylind- rical	ECR

94

Cylind- rical	Floquet	Mode	Aperture	TM
Energy	Reso- nance	Fields	Surface	TE
Refl- ection	Metal	Free Space	Plasmon	Optical
Skin depth	Thick- ness	IR	ECR	Electric
Fabry Perot	Rectang- ular	Radius	Die- lectric	Wave- length

95

Wave-guide	Magnetic	ECR	Simu-lation	Trans-mission
TM	Radius	BC	Rectang-ular	Energy
Electric	Aperture	Free Space	IR	Period
Cavity	Optical	Skin depth	Surface	Mode
Wave-length	Floquet	Reso-nance	Metal	Cylind-rical

96

BC	Fabry Perot	Period	Cavity	Meta-material
Floquet	Boundary	Magnetic	Simu-lation	Trans-mission
TM	ECR	Free Space	Wave-length	Freq-uecy
Rectang-ular	IR	Reso-nance	PEC	EOT
Wave-guide	Skin depth	RCWA	Fields	Optical

97

Trans- mission	Electric	Metal	Fields	Die- lectric
Energy	Magnetic	Refl- ection	IR	Boundary
Radius	ECR	Free Space	Skin depth	Freq- uency
Meta- material	Fabry Perot	PEC	Mode	Optical
Wave- length	Thick- ness	Rectang- ular	TM	EOT

98

Simu- lation	Wave- guide	Cavity	Boundary	Fabry Perot
Theory	RCWA	Floquet	Meta- material	Cylind- rical
Rectang- ular	Fields	Free Space	Freq- uency	EOT
IR	Aperture	BC	TE	ECR
Thick- ness	Reso- nance	Mode	Magnetic	Optical

99

Boundary	Surface	Thick- ness	Refl- ection	Freq- uency
Magnetic	Plasmon	RCWA	Period	Radius
PEC	Trans- mission	Free Space	Rectang- ular	Cylin- drical
Theory	Energy	Fields	Aperture	Optical
TM	Skin depth	EOT	Mode	Cavity

100

RCWA	Electric	Freq- uency	Refl- ection	Plasmon
Boundary	Trans- mission	Meta- material	Radius	Period
ECR	PEC	Free Space	Rectang- ular	Metal
Mode	Thick- ness	Reso- nance	TM	Wave- guide
Fabry Perot	Die- lectric	Optical	Surface	Theory