

PRINCIPAL WAVELENGTHS OF COMMONLY USED LASERS	
Laser	Wavelength (nm)
Argon (blue-green)	488.0
Argon (green)	514.5
Frequency doubled Nd:YAG	532.0
Krypton (yellow)	568.2
Krypton (red)	647.1
Tunable dye	Variable (most 570-630nm), depending on dye
Diode	Variable (most 780-850nm), depending on diode
Nd:YAG	1,064.0

Laser wavelengths need to know!!!

Excimer 193nm ultraviolet

CO2 10000, infrared

Xanthophyl is yellow so it absorbs blue green

Heme –absorbs everything but krypton red

Melanin – absorbs everything including krypton red (albinotic diabetic)

Non coherent laser – except laser diode

Q-Switching?

Mode Locking?

3 ways lasers act on tissue

photo-disruption – plasma explodes--Yag

photo-coagulation – denature of protein

photo ablation -- excimer