



Robust Laser Materials

Davis Marketing International features YAG from Laser Materials Corporation, and VANADATE materials from the highest quality growers in the Pacific Rim. Among the customers/industries using our materials are universities doing applied research, medical device manufacturers, Industrial manufacturers and defense contractors building lasers for range finders, target designators etc. Our coatings include glow discharge, IAD, IBS, and metal.

Yttrium Aluminum Garnet (YAG)

Laser Materials grow large crystals which enables lowest stress laser rods, slabs and components. Dopants offered are Neodymium (Nd) for 1064nm, Chromium Thulium Holmium (CTH) for 2090nm illumination and Erbium (Er) for 2940nm light.



VANADATE

The development of the Laser Diode allows for more efficient pumping. Materials that are more receptive has paved the way for more efficient and compact laser devices. Polarized light and other benefits are available depending on material and crystallographic orientation. Neodymium doped Orthovanadate (Nd:YVO4) is prominent, but many other dopant and host material variations such as Neodymium doped Gadolinium Vanadate (Nd:GVO4) are available.

Other Materials

Ti:Sapphire (Ti:Al₂O₃) is one of the first tunable laser materials formulated. At a continuous lasing range of 700-1000nm it certainly is the most used materials for scientific and laboratory settings, taking the place of several lasers and messy dyes. The very first material to make a laser is RUBY (Cr:Al₂O₃) for 694nm. Ruby is being used for Tattoo removal and other restorative skin procedures.

Fluoride materials available include Nd:YLF, Cr:LiSAF and Cr:LiCaGaF. Yttrium Lithium Fluoride exhibits a polarized beam for added line definition and greater efficiency. YLF is doped with either Erbium (Er:YLF) or Neodymium (Nd:YLF) to lase at 1342 and 1047nm. Cr:LiSAF & Cr:LiCaGaF are newer materials for lasing in the 700-900nm area. These materials have proven invaluable in scientific, defense and medical applications.

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