

Abstract Submitted
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Optical Filters for Use in a Plethora of Applications SARAH LICHTBLAU, Central High School Champaign, IL, ELIZABETH FOLEY, FRED LEVINTON, Nova Photonics, Inc. — Nova Photonics has invented a new kind of optical filter that has many exciting prospects. This filter is capable of allowing only a very narrow range of light through it while also allowing this light to be incident upon it from a wide range of angles. Although this sort of filter has been studied and worked on for many years, nothing has ever been able to come close to having as high a transmission rate or incident angle range as this one does. This filter also incorporates several novel ideas into it. As of now, it is already in use on NSTX (the Princeton Plasma Physics Lab's Tokamak). In this application of the versatile device it is filtering light around the red end of the spectrum. Currently the filter is also being adapted to transmit light at ~ 532 nm so the Navy can use it on their submarines. The product being made for the Navy is still in the early stages of its testing, but it is looking promising.

Sarah Lichtblau
Central High School Champaign, IL

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