

KERR/POCKELS EFFECT SOLID STATE DEVICES

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It should be possible to build an on-chip implementation of a Kerr cell (electro-optical shutter) able to operate at up to 10^{10} (nos/sec) to provide many novel display/projection/TV applications. [Kerr effect usually in a liquid e.g. nitrobenzene; Pockel effect in a solid].

Also, is there a solid-state implementation of light polarizers? (Polaroid is a crude one)

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GOLD REFINING

A possibly more efficient way of extracting gold from cooked ore might be to melt it out with selective application of microwave power. Since ceramics are OK in a microwave oven, but metal dishes are not, there must be some absorption selectivity. A further refinement might be the use of 'zone refining' techniques, passing a series of microwave-emission heats along in one sample to sweep the gold to one end.

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~~1986~~ WHITE ANT CONSOLE

White ants depend on cellulose-digesting microorganisms in their stomachs for their nutrition. To control white ants, it may be better to attack the microorganisms with antibiotics or other chemicals, rather than kill the termites themselves with insecticides.