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A special type of SOAs is that of the vertical-cavity SOA (VCSOA). This is very similar to a vertical cavity surface-emitting laser, but the top mirror reflectivity is reduced so that the laser threshold is not reached. The still significant top reflectivity is required for obtaining a reasonably high gain, since the single-pass gain through a few quantum wells is fairly low, but it also

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Jan 07, 2022 · Plasmonic lattices of metal nanoparticles have emerged as an effective platform for strong light–matter coupling, lasing, and Bose–Einstein condensation. However, the full potential of complex unit cell structures has not been exploited. On the other hand, bound states in continuum (BICs) have attracted attention, as they provide topologically protected optical …