

Abstract Submitted
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Adaptive Design of Excitonic Absorption in Broken-Symmetry Quantum Wells JASON THALKEN, WEIFEI LI, STEPHAN HAAS, A.F.J. LEVI, University of Southern California — Adaptive quantum design is used to identify broken-symmetry quantum well potential profiles with optical response properties superior to previous ad-hoc solutions. This technique performs an unbiased stochastic search of configuration space. It allows us to engineer many-body excitonic wave functions and thus provides a new methodology to efficiently develop optimized quantum confined Stark effect device structures.

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