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Abstract for an Invited Paper  
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**New technology developments to search for new dark matter candidates**

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The lack of experimental evidence of the WIMP (Weakly Interacting Massive Particles) signal candidates in many experiments with different target materials in the last two decades has pushed the development of more challenging technology to explore new theoretical explanations. The talk will give a summary of this changing scenario, discuss current technology developments for dark matter searches in the region, and focus on a semiconductor device with single electron discrimination capability (called Skipper Charge Coupled Device) which provides the most stringent constraints for light hidden-sector galactic dark matter candidates as part of the SENSEI experiment.