

Discovery

We SHARE to inspire and ignite ideas for
Engineering Product Development (EPD) Pillar!

The titles featured here are to give you a peek into the wealth of resources we have. We hope, through this will encourage you to explore and read further. Share with us topics of importance to EPD and we can introduce relevant titles from some 400,000 eBooks we carry.

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PUBLICATIONS BY EPD

Cost Minimization of Charging Stations With Photovoltaics: An Approach With EV Classification

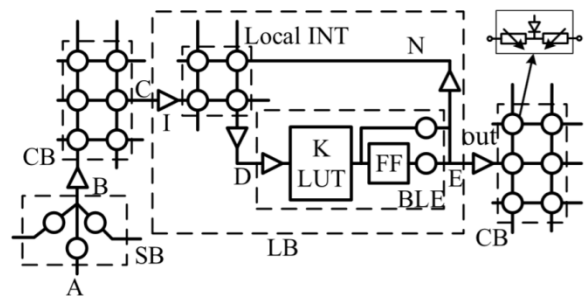


By SUTD researchers: Tushar Wayes & Yuen Chau

Presented in this article is a novel electric vehicle (EV) classification scheme for an EV charging station that is more environmental and energy-saving. It is demonstrated that there can be energy savings and cost reductions in the performance analysis with real solar and pricing data.

Source: [IEEE Transactions on Intelligent Transportation Systems](#) (January 2016)

High-Density and High-Reliability Nonvolatile Field-Programmable Gate Array With Stacked 1D2R RRAM Array



By SUTD researchers: Huang Kejie & Zhao Rong

Critical issues in static random access memory (SRAM)-based field-programmable gate arrays (FPGAs) include high power consumption and slow operation speed due to huge area overhead and volatility of SRAM. This paper has proposed a novel structure with 53% higher operation speed and 40.5% lower operation power consumption.

Source: [IEEE Transactions on Very Large Scale Integration Systems](#) (January 2016)

SMART CITIES

Smart Nation Singapore

[WEBSITE]



Smart nation has been identified as the trend and development direction for Singapore, and there it lays many possibilities and opportunities. Gain a big picture of all the major issues related to Smart Nation from this one-page interactive website, which can give valuable insights on the global challenges faced by Singapore, with informative videos and rich data beautifully illustrated by infographics.

Source: [Forbes](#) (2015)

Design Thinking Applied in Building Smart Cities

[EBOOK CHAPTER]



This ebook chapter is on how design thinking can be applied in real-world situations for building smart cities. It has shared ways that design thinking has already been used with several case studies, and assessed its usefulness in real situations. If you want to read up more on smart cities, read the entire ebook [here](#).

Source: [CRCnetBase](#) (January 2016)

AUTONOMOUS VEHICLES

On the Road to a Driverless Future



The technology has been around for quite a while, but when will the driverless cars really get on the road? Check out this article that shares the development milestones, key players on the market, technology, supply chain and safety of autonomous vehicles for quick insights of this industry.

Source: [Industry Week](#) (October 2015)

Self-Driving Cars: Who's Liable when Software is at the Wheel



Have you wondered how driverless cars may impact our day to day life? This article discusses the social impact of autonomous vehicles and everyday situations they can come into play.

Source: [Newsweek Global](#) (January 2016)