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Vision and Research Directions of 6G Technologies and Applications

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Abstract: *With millions of users, fifth-generation (5G) mobile communication technology is now extensively accessible in a number of nations. It is therefore time for industry and academia to turn their attention to the upcoming generation. This essay will provide an overview of the sixth-generation (6G) mobile network, covering its purposes and case studies, specifications, funded research initiatives, and technological advancements. To forecast the essential 6G requirements and showcase the 6G capabilities, we go over the Beyond 5G (B5G) evolution and advanced 5G features. In comparison to 5G, we also present the 6G scenarios, specifications, and technological elements. In addition, the state of 6G research is examined and a preliminary regulatory and specification roadmap is investigated. Next, we go over a few potential uses, their advantages, ideas, and future directions for research*

Keywords: Renewable Energy, Generator, Inverter Circuit, Horizontal Axis Wind Turbine, Wind Energy, Solar Panel

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