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Building integrated photovoltaics (BIPV) has enormous potential for on-site renewable energy generation in urban environments. However, BIPV systems are still in a relatively nascent stage with few commercial installations.



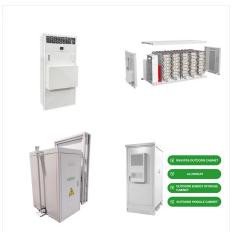
[1]? 1/4 ?BIPV Building Integrated PV,PVPhotovoltaic? 1/4 ?? 1/4 ?? 1/4 ????. ??? (BIPV) (BAPV? 1/4 ?Building Attached PV)???. ? 1/4 ? ???

## BIPV BUILDING-INTEGRATED PHOTOVOLTAICS





In addition to BIPV, building integrated photovoltaic/thermal systems (BIPV/T) provide a very good potential for integration into the building to supply both electrical and thermal loads. In this study, we comprehensively reviewed the BIPV and BIPVT applications in terms of energy generation amount, nominal power, efficiency, type and



As a working definition, "building-integrated photovoltaics (BIPV) is a renewable, solar PV technology that is integrated into buildings. It refers to solar PV components/modules that function as conventional building materials in the building envelope, such as the roof, skylights or fa?ade elements [1].



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## BIPV BUILDING-INTEGRATED PHOTOVOLTAICS





This paper reviews the main energy-related features of building-integrated photovoltaic (BIPV) modules and systems, to serve as a reference for researchers, architects, BIPV manufacturers, and BIPV designers.



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