

# 5F251 "Photovoltaic Devices"

OA01 • Encapsulation, bonding, and molding technologies for electronic components	OA02 • Solar cells and roofing technologies	OA03 • Installation of roof reinforcement for solar panels	OA04 • Joining technologies for solar modules	OA05 • Installation of photovoltaic panels							
OA06 • Solar cell technologies and their application areas	OA07 • Gas supply and materials for solar-cell manufacturing areas	OA08 • Structures and interconnections of solar-cell modules	OA09 • Manufacturing and material technologies for photoelectric conversion devices	OA10 • Details of light energy and radiation technology	OA11 • Photoelectric conversion devices and measurement technologies	OA12 • Manufacturing of photoelectric conversion devices using roll technology	OA13 • Fabrication of nanostructured solar cells				
OA14 • Solar panel and battery technology	OA15 • Equipment for cleaning and transporting solar panels	OA16 • Solar panels and related material technologies	OA17 • Power-conversion technologies for photovoltaic generation	OA18 • Solar-energy conversion and cooling technologies	OA19 • Measurement technologies for photovoltaic generation	OA20 • Solar-energy conversion technologies for spacecraft	OA21 • Power-control equipment and conversion technologies	OA22 • Photovoltaics and refractive-index technologies	OA23 • Solar-energy power conversion and management	OA24 • Optical technologies for photovoltaics	OA25 • Photovoltaics and power-management technologies
OA26 • Structures and processing of thin-film cells	OA27 • Silicon plasma deposition technology										
OA28 • Conductive materials and multilayer electrode structures	OA29 • Screen printing and conductive substrate technologies										
OA30 • Laser technologies and transparent conductive films											
OA31 • Hydrogen fuel cells and related technologies	OA32 • Electrochemical and photochemical CO2 reduction reactions										
OA33 • Weather-resistant resin films	OA34 • Prevention of damp-heat degradation in EVA modules	OA35 • Cleaning equipment and water-quality management systems	OA36 • Protective films for building materials and film-formation technologies								
OA37 • Ultraviolet irradiation technologies and applications	OA38 • Wavelength conversion of light and efficiency characteristics										
OA39 • Semiconductor materials based on nitrides and selenium compounds	OA40 • Nanomaterials and dye-sensitized solar cells	OA41 • Nanostructured materials and device technologies	OA42 • Characteristics of organic semiconductor devices	OA43 • Perovskite and silicon technologies	OA44 • Semiconductor materials and photoelectric conversion technologies	OA45 • Applications of organic semiconductors and thin-film technologies	OA46 • Semiconductor manufacturing and photovoltaic device technologies	OA47 • Photoelectric conversion technologies for compound semiconductors	OA48 • Semiconductor technologies for quantum dots and superlattices	OA49 • Semiconductor manufacturing and interconnection technologies	OA50 • Solar-cell materials and structures