43. The system of claim 41, wherein said voltage source means comprises voltage pulser means for applying a high voltage of a time-varying voltage pulse, said voltage pulser means being shut off for applying the second component.

44. The system of claim 41, further comprising switch means disposed between said voltage source means and the photovoltaic device, said voltage source means being connected with the photovoltaic device in a first position of said switch means for applying the first component and being disconnected from the photovoltaic device in a second position of said switch means for applying the second component.

45. The system of any one of claims 41, 43 and 44, further comprising voltage probe means being coupled across the photovoltaic device for monitoring an output voltage of the photovoltaic device and/or current sensor means coupled in series between the photovoltaic device and a load driven by the photovoltaic device for monitoring an output current of the photovoltaic device.

46. The system of claim 45, further comprising control means being coupled to said voltage source means for adjusting a magnitude, a duration, or a frequency of the first component to maximize a power output and/or a current output of the photovoltaic device based on the monitored output voltage and/or the monitored output current.

81. The method of any one of claims 1-5 and 14-29, wherein said applying the first component includes applying the first component to the photovoltaic device without structural modification of the photovoltaic device.

82. The method of claim 81, wherein said applying the first component comprises applying the first component to one or more existing electrodes of the photovoltaic device.

83. The method of claim 3, further comprising mitigating voltage drop-out at a load driven by the photovoltaic device while the switch means is in the first position.

84. The method of claim 83, wherein said mitigating includes supplying energy to the load from an energy storing device while the switch means is in the first position.

85. The method of claim 84, wherein the energy storing device comprises a capacitor, an inductor and/or a battery.

86. The method of claim 83, wherein said mitigating includes storing energy generated by the photovoltaic device while the switch means is in a second position.

87. The method of claim 86, wherein the generated energy is stored in an energy storing device.

88. The method of claim 87, wherein the energy storing device comprises a capacitor, an inductor and/or a battery.

89. The method of claim 16, wherein the plurality of photovoltaic devices is disposed in a series device configuration, a parallel device configuration or a combination thereof.