

ductor region **505** in an island-shape. Here, an etching stopper is provided on a semiconductor region **505**, and impurity regions **508** having one conductivity type are formed to produce a TFT. Then, wirings, an interlayer insulating film, and the like are preferably formed as appropriate by a known technique to produce an element.

[0139] Thus, after obtaining the element having the TFT, the substrate **501** is peeled in accordance with the embodiment mode. In this embodiment, a resultant layer formed on the blocking layer **502** corresponds to the layer to be peeled **11b** which is described in the embodiment mode. When the mechanical strength of the layer to be peeled is insufficient, it is preferable that the substrate is peeled after a support member (not shown) for fixing the layer to be peeled is bonded thereto.

[0140] The layer to be peeled which is formed on the oxide layer can be simply separated from the substrate by peeling. The peeled layer can be bent in a certain direction. It is needless to say that the layer to be peeled can be bonded to a transfer body (not shown) having a curved surface.

[0141] Even in this embodiment, the irradiation direction (scanning direction) of the laser light and the channel length directions of the semiconductor layer **505** provided to the layer to be peeled are set to be the same direction, and these directions and the bending direction are set to be orthogonal to each other. Thus, a display having a curved surface can be realized.

[0142] Also, this embodiment can be freely combined with the embodiment mode.

[0143] [Embodiment 3]

[0144] In accordance with the present embodiment, FIG. 8 shows a technique for transferring a layer to be peeled containing TFT.

[0145] In FIGS. 8A to 8G, reference numeral **830** indicates a first substrate; reference numeral **831** indicates a first material layer composed of a nitride layer or a metallic layer; reference numeral **832** indicates a second material layer composed of an oxide layer; reference numeral **833** indicates a layer to be peeled; reference numeral **834** indicates a first adhesive; reference numeral **835** indicates a second substrate; reference numeral **836** indicates a second adhesive; and reference numeral **837** indicates a third substrate.

[0146] In accordance with the present embodiment, the first substrate **830** may be constituted by a glass substrate, a quartz substrate, a ceramic substrate or the like. Further, it is also possible to use a semiconductor substrate such as a silicon substrate, or a metallic substrate such as a stainless steel substrate. Here, a glass substrate (#1737) having a thickness of 0.7 mm is used.

[0147] First, as shown in FIG. 8A, on top of the substrate **830**, the first material layer **831** is formed. The first material layer **831** may be a material which, immediately after the film is formed, exhibits one of compression stress and tension stress. However, it is important to use a material in which abnormalities such as peeling due to thermal processing and laser light radiation, in the forming of the layer to be peeled, do not occur, and which exhibits tension stress in a range of 1 to 1×10^{10} (Dyne/cm²) after the forming of the layer to be peeled. A representative example is a single layer constituted by an element selected from the group consisting

of W, WN, TiN, and TiW, or by an alloy metal or compound material having the element as its main component, or a laminate thereof. Note that, the first material layer **831** may be formed using a sputtering method.

[0148] Next, the second material layer **832** is formed on top of the first material layer **831**. In the second material layer **832**, it is important to use a material in which abnormalities such as peeling caused by the thermal processing and the laser light radiation, in the forming of the layer to be peeled, do not occur, and which exhibits compression stress in a range of 1 to 1×10^{10} (Dyne/cm²) after the forming of the layer to be peeled. Representative examples of the second material layer include oxide silicon, oxide silicon nitride, oxide metallic material, and a laminate of these. Note that, the second material layer **832** may be formed using a sputtering method. In the case where the second material layer **832** is formed using the sputtering method, an inert gas such as argon gas is introduced into the chamber, to include a minute amount of Argon gas elements into the second material layer **832**.

[0149] Regarding the first material layer **831** and the second material layer **832**, the film widths of each of the layers is set as needed within a range of 1 nm to 1000 nm, to thereby adjust the internal stress of the first material layer **831** and the internal stress of the second material layer **832**.

[0150] Further, in FIGS. 8A to 8G, in order to streamline the process, an example has been shown in which the first material layer **831** is formed in contact with the substrate **830**. However, an insulating layer or metallic layer serving as a buffer may be provided in between the substrate **830** and the first material layer **831** to improve the adhesion with the substrate **830**.

[0151] Next, the layer to be peeled is formed onto the second material layer **832**. (See FIG. 8A). The layer to be peeled **833** may contain various elements (e.g., a film transistor, light emitting elements in which a layer containing organic compounds serves as a light emitting layer, elements containing liquid crystals, a memory element, a thin-film diode, a photoelectric conversion element formed by a silicon pin junction, or a silicon resistor element). However, in the case of elements containing liquid crystals, the layer to be peeled **833** must include a substrate which opposes it. Further, the process of forming the layer to be peeled **833** can be accomplished by thermal processing conducted within the temperature range that the first substrate **830** can withstand. Note that, even if the internal stress in the second material layer **832** and the internal stress in the first material layer **831** are different than each other, the thermal processing in the manufacturing of the layer to be peeled **833** will not cause peeling to occur.

[0152] Next, a process is performed for partially reducing the adhesion between the first material layer **831** and the second material layer **832**. The processing for partially reducing the adhesion is a process in which a laser light is partially radiated on the first material layer or on the second material layer along the perimeter of the region to be peeled, or is a process in which localized pressure is applied from the outside along the perimeter of the region to be peeled to apply damage to a part of the inside or the surface of the second material layer. Specifically, a diamond or other such hard needle may be pressed perpendicularly and moved while applying pressure. Preferably, a scribe device is used