CLAIMS

1. A solar cell, comprising:
a substrate;
a semiconductor region disposed above and insulated from the substrate; and
a conductive foil thermally compressed to the semiconductor region.

2. The solar cell of claim 1, further comprising a first metal between the conductive foil and the semiconductor region.

3. The solar cell of claim 1, wherein the conductive foil includes aluminum.

4. The solar cell of claim 1, wherein the conductive foil is an aluminum foil coated in copper.

5. The solar cell of claim 1, further comprising a contact region for coupling the solar cell to another solar cell, wherein the contact region includes a different type of metal than the conductive foil.

6. The solar cell of claim 2, further comprising a second metal between the conductive foil and the first metal.

7. The solar cell of claim 6, further comprising an intermetallic phase of the second metal and the conductive foil.

8. A solar cell, comprising:
a single crystalline silicon substrate;
a doped silicon region disposed in the single crystalline silicon substrate;
a conductive foil thermally compressed to the doped silicon region;
a first metal between the conductive foil and the doped silicon region; and
a second metal between the conductive foil and the first metal.

9. The solar cell of claim 8, further comprising an intermetallic phase of the second metal and the conductive foil.

10. The solar cell of claim 8, wherein the conductive foil includes aluminum.

11. The solar cell of claim 8, wherein the conductive foil is an aluminum foil coated in copper.

12. The solar cell of claim 8, further comprising a contact region for coupling the solar cell to another solar cell, wherein the contact region includes a different type of metal than the conductive foil.

13. A solar cell, comprising:

a single crystalline silicon substrate;

a doped polycrystalline silicon layer disposed above the single crystalline silicon substrate;

an oxide layer between the single crystalline silicon substrate and the doped polycrystalline silicon layer; and

a conductive foil thermally compressed to the doped polycrystalline silicon layer.

14. The solar cell of claim 13, further comprising a first metal between the conductive foil and the doped polycrystalline silicon layer.

15. The solar cell of claim 14, further comprising a second metal between the conductive foil and the first metal.

16. The solar cell of claim 13, wherein the conductive foil includes aluminum.

17. The solar cell of claim 13, further comprising a contact region for coupling the solar cell to another solar cell, wherein the contact region includes a different type of metal than the conductive foil.

18. The solar cell of claim 15, further comprising an intermetallic phase of the second metal and the conductive foil.

19. A solar cell, comprising:

a substrate;

a semiconductor region disposed in or above the substrate;

a conductive foil thermally compressed to the semiconductor region;

a first metal between the conductive foil and the semiconductor region; and

a second metal between the conductive foil and the first metal.

20. A solar cell, comprising:

a single crystalline silicon substrate;

a doped silicon region disposed in the single crystalline silicon substrate; and

a conductive foil thermally compressed to the doped silicon region, wherein the conductive foil is an aluminum foil coated in copper.

21. A solar cell, comprising:

a single crystalline silicon substrate;

a doped polycrystalline silicon layer disposed above the single crystalline silicon substrate;

a conductive foil thermally compressed to the doped polycrystalline silicon layer;

a first metal between the conductive foil and the doped polycrystalline silicon layer; and

a second metal between the conductive foil and the first metal.

22. A solar cell, comprising:

a substrate;

a semiconductor region disposed above and insulated from the substrate; and

a conductive wire thermally compressed to the semiconductor region.

23. The solar cell of claim 22, further comprising a first metal between the conductive wire and the semiconductor region.

24. The solar cell of claim 22, wherein the conductive wire includes aluminum.

25. The solar cell of claim 22, wherein the conductive wire is an aluminum wire coated in copper.

26. The solar cell of claim 22, further comprising a contact region for coupling the solar cell to another solar cell, wherein the contact region includes a different type of metal than the conductive wire.

27. The solar cell of claim 23, further comprising a second metal between the conductive wire and the first metal.

28. The solar cell of claim 27, further comprising an intermetallic phase of the second metal and the conductive wire.

29. A solar cell, comprising:

a single crystalline silicon substrate;

a doped silicon region disposed in the single crystalline silicon substrate;

a conductive wire thermally compressed to the doped silicon region;

a first metal between the conductive wire and the doped silicon region; and

a second metal between the conductive wire and the first metal.

30. The solar cell of claim 29, further comprising an intermetallic phase of the second metal and the conductive wire.

31. The solar cell of claim 29, wherein the conductive wire includes aluminum.

32. The solar cell of claim 29, wherein the conductive wire is an aluminum wire coated in copper.

33. The solar cell of claim 29, further comprising a contact region for coupling the solar cell to another solar cell, wherein the contact region includes a different type of metal than the conductive wire.

34. A solar cell, comprising:

a single crystalline silicon substrate;

a doped polycrystalline silicon layer disposed above the single crystalline silicon substrate;

an oxide layer between the single crystalline silicon substrate and the doped polycrystalline silicon layer; and

a conductive wire thermally compressed to the doped polycrystalline silicon layer.

35. The solar cell of claim 34, further comprising a first metal between the conductive wire and the doped polycrystalline silicon layer.

36. The solar cell of claim 35, further comprising a second metal between the conductive wire and the first metal.

37. The solar cell of claim 34, wherein the conductive wire includes aluminum.

38. The solar cell of claim 34, further comprising a contact region for coupling the solar cell to another solar cell, wherein the contact region includes a different type of metal than the conductive wire.

39. The solar cell of claim 36, further comprising an intermetallic phase of the second metal and the conductive wire.

40. A solar cell, comprising:

a substrate;

a semiconductor region disposed in or above the substrate;

a conductive wire thermally compressed to the semiconductor region;

a first metal between the conductive wire and the semiconductor region; and

a second metal between the conductive wire and the first metal.

41. A solar cell, comprising:

a single crystalline silicon substrate;

a doped silicon region disposed in the single crystalline silicon substrate; and

a conductive wire thermally compressed to the doped silicon region, wherein the conductive wire is an aluminum wire coated in copper.

42. A solar cell, comprising:

a single crystalline silicon substrate;

a doped polycrystalline silicon layer disposed above the single crystalline silicon substrate;

a conductive wire thermally compressed to the doped polycrystalline silicon layer;

a first metal between the conductive wire and the doped polycrystalline silicon layer; and

a second metal between the conductive wire and the first metal.