

Index

A

Amorphous, 4, 9, 50, 71, 75, 79, 80, 88, 89

C

Channel, 1–4, 9–15, 33, 35, 37, 39, 41, 43, 45, 47, 59, 61, 63, 65, 67, 69, 83, 85, 87

D

Deep-level defects, 17, 39

Density-of-states (DOS), 4, 7, 11, 12, 14–17, 24, 27–29, 31, 34, 35, 37–40, 46–48, 52–54, 60, 63–65, 67–70, 73–76, 78, 79, 83, 84, 86–89, 95, 99, 100

Device physics, 1, 3, 15

I

InGaZnO, 9, 59, 65, 71, 75, 88, 99

Interface trap, 5–11, 13–15, 33, 70, 94, 95, 99

Interfacial trap, 6, 11, 15, 17, 29, 38, 64, 70, 79, 88, 99

M

Mobility, 3, 4, 10, 11, 13, 15, 35, 38, 40, 44, 45, 47, 49, 53, 54, 61, 67–70, 87, 88, 90–92

Monochromator, 17, 20, 22–24, 26, 32, 41, 49, 60, 67

N

Nano FET, 83

Nanosheet, 89–95, 99

Nanowire, 84, 85, 95

O

Organic field effect transistor, 31

Oxide, 1, 14, 32, 36, 59, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80

P

Photo-excited charge-collection spectroscopy (PECCS), 1, 11, 15, 17, 18, 19, 21, 23–25, 27, 28, 31–33, 35, 37, 39, 41, 43, 46–54, 59–80, 83–95, 99, 100

Pentacene, 32, 36–38

Photon-probe, 70, 83

Polymer, 47, 49, 51, 53

S

Small molecule, 31, 33, 35, 37, 39–41, 43, 45, 47, 50, 54

Stability, 31, 38–40, 43, 45, 49, 61, 67, 83

Subthreshold swing, 6

T

Thin-film transistor (TFT), 1, 3–5, 7–13, 17, 25–27, 60–65, 67–72, 74–79, 84, 85, 88, 89, 95

Trap DOS, 15, 24, 27, 46, 47, 68–70, 73–75, 78, 79, 83, 84, 87, 88, 95, 99, 100

Z

ZnO, 25–28, 59–65, 70, 79, 80, 83–85, 87–89, 95, 99

ZnO TFT, 25, 26, 60–63, 70, 84, 88, 95