High performance thin-film transistor (TFT) with amorphous InGaZnO$_4$ semiconductor

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1. Thin film transistor (TFT)
   - Switching device & Driving device in display such as LCD, OLED, Flexible Electronics

2. High performance of InGaZnO$_4$ TFT
   - High electron mobility
   - Room temperature & large area deposition
   - Glass & Polymer film available as substrate
   - High optical transparent semiconductor

3. InGaZnO$_4$ TFT applications
   - OLED application (TFT on glass)
   - Flexible electronics application (TFT on polymer film)

3.5” QCIF AM-OLED

4. Patent status & Patent owner contact
   - Patent license is available
   - Patent owner contact: Masaru OZAKI (JST)
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![High Quality IGZO Sputtering Target]

- High Density
  - > 95% for less nodules or particles

- DC Sputtering
  - Low Bulk-Resistivity
  - 10$^2$ $\Omega$ cm or less

- Large size
  - > 150 mm $\times$ 1200 mm
  - For high productivity

- Stable Sputtering
  - Uniform Microstructure

Contact: FujikaycHi, Tel +81-(0)3-575-6771, Nippon Mining & Metals Co., LTD