

Contents

1. Systematics of chemiresistors for gas detection
2. Sensor architecture, function of individual constituents
3. Nano-scale view: Transduction mechanisms in distinct classes of basic materials for sensitive layers
 - 3.1 Metal oxides
 - 3.2 Organic non-polymeric complexes
 - 3.3 Organic polymers
 - 3.4 Polymerized ionic liquids
4. Macro-scale view: Parameters of chemiresistor device
5. Future prospects: Comprehensive study of correlation between transduction mechanisms and macro-scale parameters