
Description: The chemistry of the new electronics and electrics is key to its future, whether it is invisible, tightly rollable, biodegradable, edible, employing the memristor logic of the human brain or possessing any other previously-impossible capability in a manufactured device. De-risking that material development is vital yet the information on which to base that has been unavailable. No more.

See how the metals aluminium, copper and silver are widely deployed, sometimes in mildly alloyed, nano, precursor, ink or other form. Understand the 12 basic compounds most widely used in the new electronics and electrics and compare them with compounds exhibiting the broadest range of appropriate electrical and optical functions for the future. Those seeking low volume, premium priced opportunities can learn of other broad opportunities. Indeed, we cover in detail all the key inorganic and organic compounds and carbon isomers. We show how the element silicon has a new and very different place beyond the silicon chip. Learn how the tailoring of a chosen, widely-applicable chemical can permit premium pricing and barriers to entry based on strong new intellectual property. For example, see which of 15 basic formulations are used in the anode or cathode of the re-invented lithium-ion batteries of 131 manufacturers and what comes next.

We identify 37 families of new and rapidly-evolving electronic and electric device, spanning nano to very large devices. Most chemical and material companies wish to de-risk their investment by finding common formulations across this new business that has a potential of over $50 billion for them. This will reduce R&D cost and provide escape routes to sell their current formulations elsewhere if they prove unsuccessful in the first application addressed. Indeed, the biggest markets for new and reinvented electrical and electronic devices may get commoditised first or collapse suddenly, leaving the materials suppliers high and dry. Read this report to avoid such a fate.

Who should buy this report?

All advanced chemical and material manufacturers and developers - both chemical companies and equipment manufacturers with deep vertical integration.

To a lesser extent those making the devices and key circuit technologies such as printed electronics, organic electronics, wide area electrics and very high volume electronics. Smart packaging. Smart labels. Investors and acquirors in these industries, particularly in advanced chemical and material manufacturers and developers. Academics and research centers covering advanced chemicals and materials for electronics and electrics. Particularly huge opportunity in Japan, Germany and USA.

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