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A-O-1 Recent Progress in Magnetic Bubble Devices and Materials

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The magnetic bubble technology has made remarkable progress in the areas of novel devices, lithography, and storeage media, to demonstrate feasibility of storage density of 10⁸ bits/inch² and beyond. We shall review the novel devices which include single-level-masking amorphous film devices, contiguous disk devices, and bubble lattice devices, the advanced lithography techniques which utilize electron beam, X-ray, and UV (conformable printing) for exposure and small bubble and/or temperature-insensitive storage media (both amorphous films and epitaxial garnets). In addition, the basic capabilities in terms of density, speed, and functional versatility will be assessed.