Solid-state battery applications

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Explore the world of solid state lithium batteries. Discover how they differ from traditional lithium-ion batteries and their potential applications in various industries.

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OverviewMaterialsHistoryUsesChallengesAdvantagesThin-film solid-state batteriesInnovation and IP protectionCandidate materials for solid-state electrolytes (SSEs) include ceramics such as lithium orthosilicate, glass, sulfides and RbAg4I5. Mainstream oxide solid electrolytes include Li1.5Al0.5Ge1.5(PO4)3 (LAGP), Li1.4Al0.4Ti1.6(PO4)3 (LATP), perovskite-type Li3xLa2/3-xTiO3 (LLTO), and garnet-type Li6.4La3Zr1.4Ta0.6O12 (LLZO) with metallic Li. The thermal stability versus Li of the four SSEs was in order of LAGP < LATP < LLTO < LLZO. Chloride superionic c...

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