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Room-Temperature Superconductivity: Prospects but Challenges¹

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Why do we not have ambient temperature superconductivity and all the benefits it would bring? If the challenge were less than profound, our celebrated industrial research/development approach should have succeeded in achieving this objective already. In fact, however, the unknowns we face with this issue are believed to involve entangled-many-body quantum mechanics beyond the limits of present understanding. We shall review these issues.

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