Abstract for an Invited Paper
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James C. McGroddy Prize Talk: What Was New About C60
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C60 was named molecule of the year by Science in 1991, and in this talk I will discuss what I consider to be the most novel features of the molecule. In some ways C60 is truly unique and the discovery of the molecule in 1985 and its subsequent synthesis in 1990 blazed a trail of new chemical and physical properties that is unlikely to be surpassed by any other molecule. I will discuss the electronic structure of C60, its magnetism, and the conductivity and superconductivity shown by the alkali metal-doped phases.

1Work Performed at AT&T Bell Laboratories.