

CHAPTER 11

Arylamine-based High Performance Polymers for Electrochromic Applications

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11.1 Introduction

11.1.1 High-performance Polymers

High-performance polymers (HPPs) are the major and most desirable synthetic materials of the 21st century. The synthesis and development of HPPs in the past three decades have particularly received extensive attention from many polymer chemists. Mostly, HPPs exhibit outstanding dimensional stability and chemical deterioration resistance at extreme operating conditions. Hill and Walker initiated the HPPs by incorporating aromatic compositions into polymer chains, resulting in a notable thermal stability enhancement.¹

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