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家用电器技术大会

论文集

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技术之光（代序）

从创新角度看，2014 年是全球家电业可圈可点的一年。透过 2014 年 2 月的美国 CES、3 月中国上海的 AWE、9 月德国的 IFA，可以看出，包括智能在内的技术创新，无论是在国外还是中国都在加速进化。

其实重头戏在展场之外。2014 年，家电龙头企业智能家电的技术创新步伐都在提速。对于成熟、传统的家电产业，智能将带来什么样的价值？今天的进展告诉我们，答案在于要瞄准产品在用户体验上的痛点，用智能来提供最优的解决方案。而正在进化的家庭网络、云数据、云计算平台是智能家电不可或缺的生态环境。从上游的无线电通信技术公司、芯片供应商，到跨界合作发展的网络公司，都让智能家电的想象空间更大更广，让智能方案落地的路径更多更宽。遵循整个家电行业的智能发展趋势，2014 年设在中国家用电器协会的“智能家电”工作组是国际家电制造商协会圆桌会议（IRHMA）四个工作组之一，设定的工作目标就是“支持制定协调一致的智能家电政策和标准，令消费者更为受益，同时改善电网效率”。

也许今天智能家电的进化还处在初期，但毋庸置疑，2014 年是智能家电进化进程加速的一年，智能化势必成为家电的产业升级的成功路径之一。“智能化、节能环保和新材料”也正是 2014 年中国家用电器技术大会的主题。来自国内外业界以及上游和伙伴公司的专家们的交流，将在“智能家电”聚焦。

智能化可以使传统家电如虎添翼，但是“猫”是“虎”，产品的功能性能却是基本功。历年论文集的主要内容都集中在产品功能和性能的研究、新材料和新工艺的研究上，今年依然如此。不同的是，今年论文的数量更多——总共收到论文 214 篇——是历届之最；产品范围更宽，值得一提的是，厨电类的论文数量明显增多；论文涉及的研究内容更宽、更深入、更细分，尤其令人欣喜的是我们还看到了全新结构产品开发的论文，如《超高效全新结构微型压缩机的开发》。可以看出，我们的企业在研发上下着大功夫；我们行业的研发队伍人才济济，研发的能力和水平持续提升，参与论文交流的氛围更加浓厚。这就是今年这本《2014 年中国家用电器技

术大会论文集》所透露出来的气息。

其实，令我们自豪的还有一个重要方面，就是这本论文集中论文的原创新性。今年一项新的举措是，编辑部用软件对所有论文进行了查重检索。结果表明，收到的论文中 75% 与论文库中论文重合率（简称：查重率）低于 10%，更有多达 58 篇的查重率为 0——这意味着整篇论文从选题、摘要到结论完全是原创。从中不难看出，论文作者主要来自行业研发一线的工程技术人员，论文的研究内容紧贴实际应用，因此也呈现了多样性。今年，我们对于超过查重率标准的论文，一律作退回处理，以把论文集版面更多地留给更具原创性的论文，依此淘汰的论文为 6.5%。可以说，这本论文集中论文的研究内容，有极好的原创性。

当然，论文的整体质量水平也在提升。本次论文评审提高了收录论文的标准，对于论述不清晰、写作不规范、有明显广告倾向的论文均作了退回处置。在进入专家评审环节的 200 篇论文中，大部分得到了专家的肯定并评选出优秀论文 37 篇，其中不少是得到两个以上专家的背对背推荐。专家对部分论文提出了修改意见，其中一部分意见仅针对论文写作格式不规范的问题，因此，大部分作者也把修改论文变成了论文写作的训练过程。本次论文集共收录论文 154 篇。

在此，感谢所有论文作者。感谢他们所做的研发工作和分享；感谢解国珍、胡自强、李红旗、吴建华、陈江平、何国庚、祁冰、鲁建国、凌宏浩、万春晖等专家的精心评审工作。

沉甸甸的一本论文集，凝聚着作者的辛勤工作和研究成果，凝结着专家们的教诲，也凝结着编辑们汗水，更凝结着读者的期待。现在，它与我们见面了。愿这本饱含技术之光的论文集，带给整个家电行业前行的力量。

中国家用电器协会副理事长

2014 年 10 月 16 日

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