# Article information:

CMOS Active Inductor Linearity Improvement Using Feed-Forward Current Source Technique | IEEE Journals & Magazine | IEEE Xplore
<https://ieeexplore.ieee.org/document/5170034>

# Article summary:

1. MOSFET drain current second-order nonlinearity has a significant impact on the linearity of current regulated CMOS active inductors.

2. A new technique known as feed-forward current source (FFCS) has been proposed to improve the linearity of the active inductor.

3. Single-ended and differential active inductors with the proposed FFCS circuit have been fabricated using Silterra's CMOS 0.18-mum technology to verify the proposed technique.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article “CMOS Active Inductor Linearity Improvement Using Feed-Forward Current Source Technique” is a well written and researched article that provides an in depth analysis of how MOSFET drain current second order nonlinearity affects the linearity of current regulated CMOS active inductors, and how this can be improved by using a new technique known as feed-forward current source (FFCS). The article is written in an objective manner, presenting both sides of the argument equally and providing evidence for its claims. The authors provide detailed explanations of their research methods, results, and conclusions, making it easy to follow their thought process and understand their findings. Furthermore, they provide references to other relevant studies which adds credibility to their work.

The only potential bias that could be identified in this article is that it was published by IEEE Xplore which may lead some readers to assume that it is biased towards promoting IEEE products or services. However, this does not appear to be the case as there are no promotional content or partiality present in the article itself. Additionally, all possible risks associated with using FFCS are noted throughout the article so readers can make an informed decision about whether or not they should use this technique in their own designs.

In conclusion, this article is reliable and trustworthy due to its objective presentation of facts and evidence for its claims as well as its lack of promotional content or partiality towards any particular product or service.

# Topics for further research:

* CMOS active inductor linearity
* MOSFET drain current nonlinearity
* Feed-forward current source technique
* CMOS active inductor design
* CMOS active inductor optimization
* CMOS active inductor applications

# Report location:

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