

Submission ID: 1078

Paper title: KOSIM:A Knowledge-oriented Derivative-free Subspace Method Based on Inexact Model for Inverse Lithography Problems

Clarity / Writing Style (1-5): 2

5 = Very clear.

4 = Understandable.

3 = Mostly understandable.

2 = Important questions are hard to resolve.

1 = Much of the paper is confusing.

Originality / Innovativeness (1-5): 4

Note that a paper could score high for originality even if the results do not show a convincing benefit.

5 = Noteworthy new problem, technique, methodology, or insight.

4 = Creative: Relatively few people in our community would have put these ideas together.

3 = Somewhat conventional.

2 = Obvious, or a minor improvement on familiar techniques.

1 = Significant portions have actually been done before or done better.

Impact of Ideas and/or Results (1-5): 5

5 = Will affect the field.

4 = Some of the ideas/results will substantially help other people's ongoing research.

3 = Interesting but not too influential.

2 = Marginally interesting.

1 = Will have no impact on the field.

OVERALL RECOMMENDATION (1-5): 3

This is the score that will be used for the ranking of the paper.

5 = Top paper (does not need to be award winning though).

4 = Very good paper (only the 25% of the papers should have this ranking or higher).

3 = Borderline: Needs lots of discussion.

2 = Mediocre: Too many weaknesses.

1 = Poor.

Reviewer Confidence (1-3): 1

1 = Low.

2 = Medium.

3 = High.

Summarize shortly the contributions of the paper in your own words.

Summary should explain shortly (**in 1-3 sentences**) the main technical contribution.

Do not discuss strengths and weaknesses here.

Introduce the way of inexact gradient and separable quadratic inexact model.

Strengths

What are the strengths of the paper? Itemized list of **max 5 strongest points** (just list shortly).

- Reduce the complexity of computation.
- Reduce the number of evaluations.
- Reduce the number of iterations and the walltime.
- Improve the optical lithography quality.

Weaknesses

What are the weaknesses of the paper? Itemized list of **max 5 weakest points** (just list shortly).

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