---------- REVIEW 1 ----------

The paper presents an algorithm that enumerates all convex polytopes that can be made by gluing together a given number n of unit squares edge along edge (it is also allowed to fold the squares to make edges of the polytope). The algorithm has polynomial running time in n.

I think it is an interesting result that can be accepted.

It is not correct to say that the algorithm runs in polynomial time, since the input (the number n) consists of just O(log n) bits. The algorithm is only pseudopolynomial.

It should be mentioned in the abstract that all the squares are unit squares.

The paper was at first quite confusing to me, since it is not well described that the polygons can be folded in order to make edges of the resulting polyhedron.

---------- REVIEW 2 ----------

The authors consider the problem of enumerating all convex polyhedra glued from squares.
They show a polynomial-time algorithm for this problem by showing that the number of such gluings is polynomial in n, where n is the number of squares.

I think the results are interesting, and the paper is mostly written well,
however, there are places where it could be improved.
For example, "n" is mentioned in the abstract and in the introduction but it does not mention
that it refers to the number of squares.

I recommend an acceptance.

---------- REVIEW 3 ----------

This paper considers the problem of enumerating all non-isomorphic edge-to-edge gluings of squares that correspond to convex polyhedra. The authors present two main result: combinatorial result and algorithmic result. First, they show that the number of edge-to-edge gluings of indential squares is at most n^{36}. Then using this, they show how to enumearte all edge-to-edge gluings, and then find all non-isomorphic edge-to-edge gluings.

This paper is written very well, and the problem is interesting as well. I suggest to accept this submission.