## Accepted Manuscript

Title: An algorithm for gradient-based dynamic optimization of UV flash processes

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## ACCEPTED MANUSCRIPT

- We present asingle-shooting algorithm for optimal control of UV flash processes.
- The algorithm uses an adjoint method to compute gradients.
- We formulate the optimal control problem as a bilevel optimization problem.
- A simultaneous approach for UV flash simulation is faster than a nested approach.
- We compare optimization software, linear algebra software, and compilers.

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