

For violin, press command-print - [News]

Publisher: IEEE

[Cite This](#)

[PDF](#)

Abstract:

SINCE THE 1500s, artisans known as luthiers have been making violins by hand. With saws, chisels, planes, calipers, and a keen eye as tools, a luthier spends dozens of hours sweating the details of every line and every curve in each piece of wood. But the transparent plastic violin pictured in the foreground—being played in January at the TCT Japan 2020 expo in Tokyo—took shape inside a 3D printer. The instrument, produced by the Tokyo Metropolitan Industrial Technology Research Institute, owes its form, fit, and symmetry to computerized scans of a wooden instrument. Those blueprints guided the machine as it went through the additive manufacturing process whereby layer after layer of resin is built up—a far cry from the painstaking sculpting process that luthiers have used for centuries.

Published in: [IEEE Spectrum](#) (Volume: 57 , Issue: 4 , April 2020)

Page(s): 14 - 15

INSPEC Accession Number: 19509129

Date of Publication: 03 April 2020 [?](#)

DOI: [10.1109/MSPEC.2020.9055905](#)

► [ISSN Information:](#)

Publisher: IEEE

