

NanoFiche®

Archive Once • No Migration • No Maintenance • Analog • Noble Metal • No Energy costs

Every preservation medium you use today puts your records back on your to-do list forever. Digital must be migrated. Film must be climate controlled and duplicated. NanoFiche is engraved in solid nickel and then it is simply **done**: no migration, no vault, no maintenance, readable with any microscope for thousands of years.



Bruce Ha - Founder and Inventor of NanoFiche

Patents granted:
10,235,542 · 8,717,650
· 8,264,757 · 7,961,367
· 7,830,573 · 7,120,097
· 7,057,993 · 7,028,011
· 6,898,172 · 6,480,462

bruce.ha@nanofiche.com
Phone: 585.880.7134

THREE WORKFLOWS

Digital Preservation

1. Scan documents
2. Store on servers + offsite replicas
3. Power, cool & secure 24/7/365
4. Monitor for data rot & cyber threats
5. Migrate formats & hardware every 5-10 yrs
6. Repeat steps 3-5 forever

5-10 full migrations in 50 years, a permanent liability.

Microfiche

1. LE-500 silver halide
2. QC: resolution, density, methylene tests
3. Store below 70°F / 40% RH in vault
4. Inspect periodically for redox & mold
5. Re-duplicate as needed
6. Maintain readers & shrinking film supply chain

Survives only as long as the vault conditions do for up to 500 years.

NanoFiche

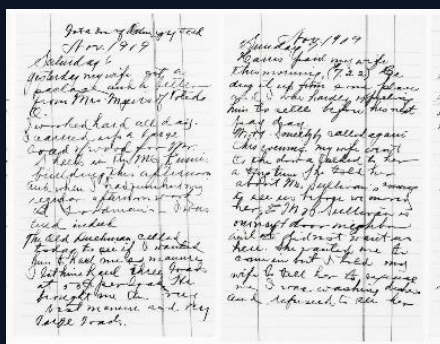
1. Image documents (analog or born-digital)
2. Engrave at nanoscale on solid nickel
3. Place on any shelf
4. **Done.**

Zero maintenance steps for the next 50 or 5,000 years. Includes digital access copy; recover anytime by scanning the plate, with AI transcription to searchable PDF.

1 MILLION PAGES, TOTAL 50-YEAR COST COMPARISON

Cost Category	Digital / Data Center	Traditional Microfiche	NanoFiche
Initial setup / capital	Very Low - Est. \$30K	High - Est. \$180K	Medium - Est. \$250K
Annual maintenance	Very High - Est. \$30K/yr = \$1.5M	Low-medium - Est. \$6K/yr = \$300K	Very low Est. under \$5K
Electricity / HVAC	Extremely high - Est. \$500K	High - Est. \$150K	Very low - none required. \$0
Migration / refresh	Very high - Est. \$600K	Medium - Est. \$90K	None - \$0
Access equipment	High - Est. \$150K	Medium - Est. \$60K	Low - optical viewers. Est. \$5K
Risk exposure	Outages, obsolescence, disaster loss	Degradation if environment fails	Minimal - fire, flood & EMP resistant
TOTAL 50-YEAR COST	HIGHEST - EST. \$3.0M+	MEDIUM - EST. \$780K	LOWEST - EST. \$260K

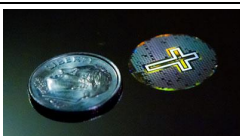
Planning estimates in 2026 dollars for one million pages preserved for 50 years. Actual costs vary by collection size and formats. Contact us for a quote on your holdings.



HISTORICAL DOCUMENTS • MANDATED ANALOG RECORDS • COUNTY LAND • VITAL • WILLS • COURT CASES • NUCLEAR WASTES • ENGINEERING DRAWINGS

These **1919 diary pages** from the Allen County Public Library's Warfield collection were engraved on a nickel NanoFiche disc and read back at **200x on an ordinary microscope** - no software, no format, no power required. The same technology carried the Arch Mission Foundation's **30-million-page Lunar Library to the Moon** and preserves archives at the **Smithsonian** and the **National Library of Israel**.

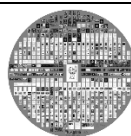
Licensed for use: Microsoft, Technicolor, 3DCD, Arch Mission, Long Now Foundation, Richline + more



The Bible beside a dime



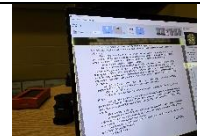
150 books in a stack



Digital Viewer



Compact



Recovered page

Visit us at the SAA Annual Meeting and see a complete Bible beside a dime, under the scope.

| nanofiche.com · institutional preservation · family legacy |

NanoFiche® is a registered trademark of Stamper Technology, Inc. · U.S. Patents 8717650 · 8264757 · 7961367 · 7830573 · 10235542 · Made in the USA

NANOFICHE® PERSONAL ARCHIVE

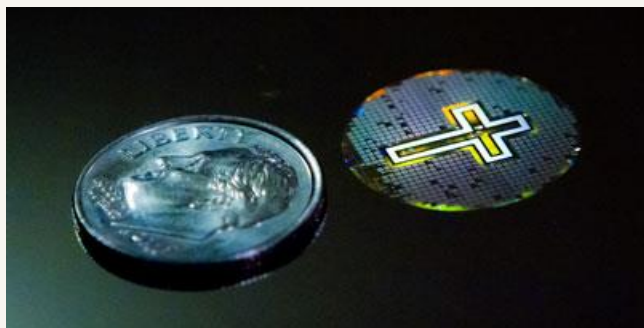
Family Legacy

PERSONALIZED NANO ARCHIVAL KEEPSAKES · FOR KEEPERS OF THE RECORD

You spend your career making other people's records permanent. **This one is yours.**

Coin sized NanoFiche medallions carry your chosen record: a family history, a complete sacred text, letters, or photographs, nano engraved word for word on archival metal by NanoFiche®, the same preservation technology archived at the Smithsonian and on the Moon.

ARCHIVAL GRADE. LITERALLY.



- ◆ **A terminal preservation state.** Precision engraved in noble metal with no migration cycles, no maintenance, no power, no software. Ever.
- ◆ **Human readable by design.** Content is recovered with simple optical magnification, and an online pendant reader is included for convenience.
- ◆ **Astonishing density.** The entire King James Bible, 788,258 words in 31,102 verses, fits on a medallion the size of a dime.
- ◆ **Built for the elements.** Radiation resistant nickel and stainless steel that shrug off heat, cold, water, and centuries.

PERSONAL. WEARABLE. YOURS.



- ◆ **Custom keepsakes.** Your family tree, genealogical records, a parent's letters, wedding vows, or a lifetime of photographs engraved into a single pendant.
- ◆ **Faith collections.** Complete sacred texts for Christian, Catholic, Jewish, Buddhist, Hindu, Islamic, and LDS traditions.
- ◆ **Heirloom storage.** Fire proof solid stainless steel capsule container and wearable accessories.
- ◆ **A finding aid for your life.** The record travels with you and passes intact to the generations who come after.

HOW IT WORKS High resolution imaging → precision nano engraving on archival metal → readable for 10,000 years

TRUSTED WHERE PERMANENCE IS THE MANDATE

Smithsonian National Air & Space Museum · National Library of Israel · Long Now Rosetta Project · America 250 Time Vault · Rochester Institute of Technology · Six Lunar Missions. Yes, the Moon.



Microscope Viewer



Personalized



Personalized



Personalized



Fire Proof Capsule

Visit us at the SAA Annual Meeting and see a complete Bible beside a dime, under the scope.

| nanofiche.com · institutional preservation · family legacy |

NanoFiche® is a registered trademark of Stamper Technology, Inc. · U.S. Patents 8717650 · 8264757 · 7961367 · 7830573 · 10235542 · Made in the USA