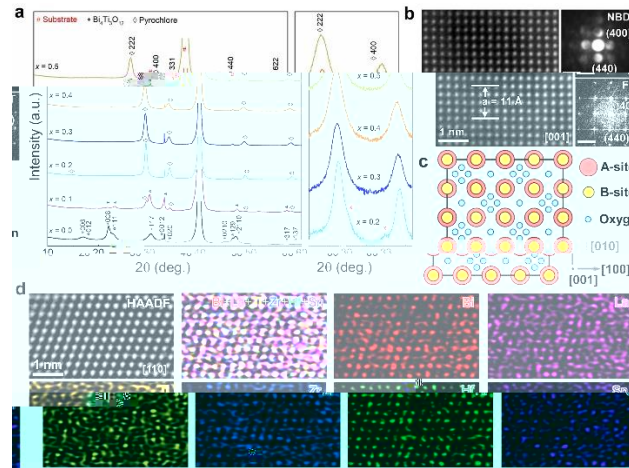


Fellow

" 2022 " 2023 .

$\text{Bi}_2\text{Ti}_2\text{O}_7$



(~0.6)

182 J cm^{-3}

78%

x = 0.4

High-entropy enhanced capacitive energy storage
Nature Materials

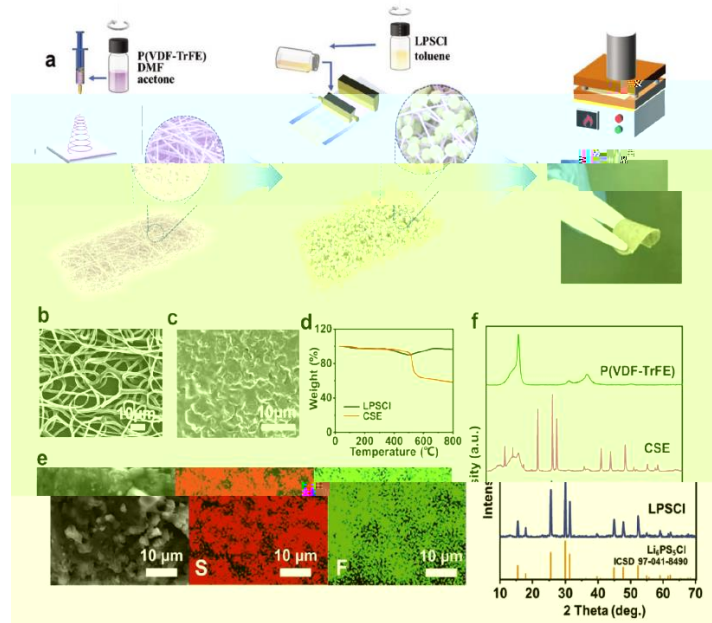
<https://www.nature.com/articles/s41563-022-01274-6>

1000

92%

20000

71%



$\text{Li}_6\text{PS}_5\text{Cl}$

Thin $\text{Li}_6\text{PS}_5\text{Cl}$ -Based Electrolyte

Super Long-Cycling All-Solid-State Battery with
Advanced Energy Materials

:

Nature Review Materials
Advanced Materials

Science
Advanced

Nature Communications

Energy Materials

2018

2017

<https://doi.org/10.1002/aenm.202200660>

KNN

-

KNN

KNN

-

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{200}

1250 pm/V

Jürgen Rödel

Manuel Hinterstein

Qm d 33

KNN

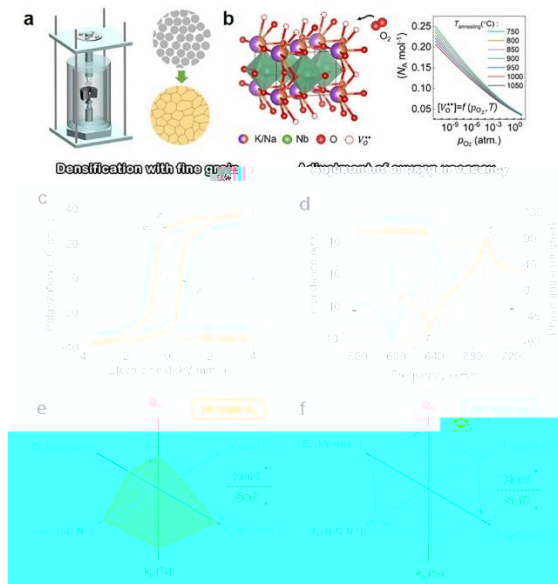
d33

Qm 60%

Qm d 33

KNN

Qm



KNN

Piezoelectrics

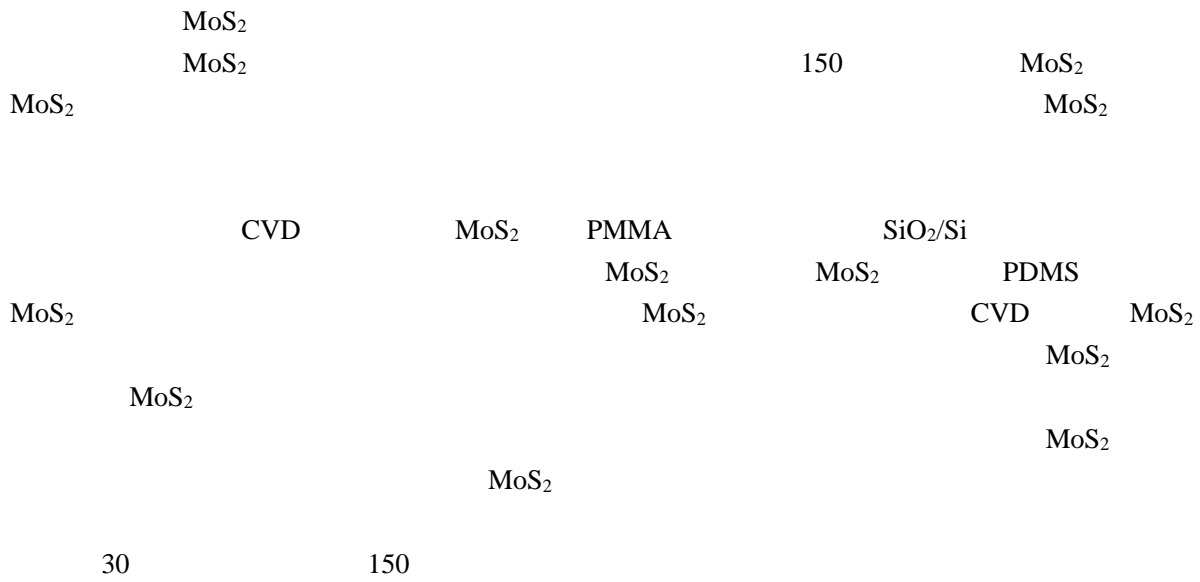
Isolated-Oxygen-Vacancy Hardening in Lead-Free Advanced Materials

2017

2022 6

<https://doi.org/10.1038/s41467-022-31158-x>

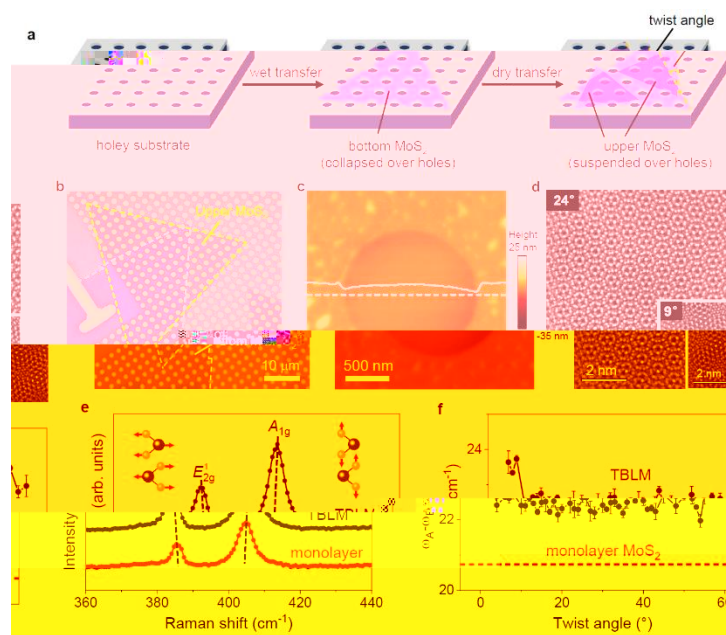
<https://doi.org/10.1002/adma.202202558>



bilayer MoS₂ by nanoindentation

MoS₂

Determining the interlayer shearing in twisted
Nature Communications



MoS₂

<https://www.nature.com/articles/s41467-022-31685-7>

12

500

10

500

34.4%

2019

<https://www.pnas.org/doi/epdf/10.1073/pnas.2208060119>

IUMRS

2022 6

2021-2022

1991

IUMRS, International Union of Materials Research Societies

Fellow

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System

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Takao Someya

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1994

2003

2006

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