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## Fundamental and Applied Mechanical Behavior of Ceramics

## Examples:

- Intentionally fracturing semiconductors to reduce the cost of photovoltaics
- Failure in lithium ion batteries due to fracture of cathode material
- Designing transparent conducting oxides for durability
- Understanding pressure induced transformation for designing oxide coating s in ceramic matrix composites

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18% solar cell fractured off substrate



transparent electrodes for flexible electronics



strange fracture patterns in aged Li battery material







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