

# Peng Dong

## List of Publications by Year in descending order

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Version: 2024-02-01

25  
papers

224  
citations

1163117

8  
h-index

996975

15  
g-index

25  
all docs

25  
docs citations

25  
times ranked

150  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Impurity engineering of Czochralski silicon. <i>Materials Science and Engineering Reports</i> , 2013, 74, 1-33.   | 31.8 | 52        |
| 2  | Germanium effect on oxygen precipitation in Czochralski silicon. <i>Journal of Applied Physics</i> , 2004, 96, 4161-4165.   | 2.5  | 33        |
| 3  | Germanium-doped Czochralski silicon for photovoltaic applications. <i>Solar Energy Materials and Solar Cells</i> , 2011, 95, 2466-2470.   | 6.2  | 24        |
| 4  | Light-induced beneficial ion accumulation for high-performance quasi-2D perovskite solar cells. <i>Energy and Environmental Science</i> , 2022, 15, 2499-2507.  | 30.8 | 18        |
| 5  | Synergistic effects of bithiophene ammonium salt for high-performance perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2022, 10, 9971-9980.  | 10.3 | 14        |
| 6  | Effect of germanium on the kinetics of boron-oxygen defect generation and dissociation in Czochralski silicon. <i>Applied Physics Letters</i> , 2010, 97, 162107.   | 3.3  | 12        |
| 7  | Electron Radiation Effects on the 4H-SiC PiN Diodes Characteristics: An Insight From Point Defects to Electrical Degradation. <i>IEEE Access</i> , 2019, 7, 170385-170391.  | 4.2  | 8         |
| 8  | Understanding the Influence of Cation and Anion Migration on Mixed-Composition Perovskite Solar Cells via Transient Ion Drift. <i>Physica Status Solidi - Rapid Research Letters</i> , 2021, 15, 2100225.   | 2.4  | 8         |
| 9  | Sample thickness effect of thermal vibration correction within X-ray dynamical theory for germanium-doped silicon. <i>Journal of Applied Physics</i> , 2017, 121, 125704.   | 2.5  | 7         |
| 10 | Atomistic Mechanism of $4\langle i \rangle H\langle /i \rangle - \langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle Si \langle /mml:mi \rangle \langle mml:mi \rangle \langle mml:mathvariant="normal" \rangle C \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle mml:mo \rangle / \langle /mml:mo \rangle \langle mml:mrow \rangle \langle mml:mi \rangle Si \langle /mml:mi \rangle \langle mml:mi \rangle \langle mml:mathvariant="normal" \rangle O \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle mml:mn \rangle 2 \langle /mml:mn \rangle \langle /mml:msub \rangle \langle /mml:math \rangle$ Interface Carrier-Trapping Effects on Breakdown-Voltage Degradation in Power Devices. <i>Physical Review Applied</i> , 2021, 15, . | 3.8  | 7         |
| 11 | Quantitative Study of the Evolution of Oxygen and Vacancy Complexes in Czochralski Silicon. <i>Applied Physics Express</i> , 2012, 5, 021302.   | 2.4  | 6         |
| 12 | Study of gamma-ray radiation effects on the passivation properties of atomic layer deposited Al <sub>2</sub> O <sub>3</sub> on silicon using deep-level transient spectroscopy. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 1148-1152.  | 2.2  | 6         |
| 13 | Relating Gain Degradation to Defects Production in Neutron-Irradiated 4H-SiC Transistors. <i>IEEE Transactions on Nuclear Science</i> , 2021, 68, 312-317.  | 2.0  | 6         |
| 14 | Effects of Neutron Irradiation on the Static and Switching Characteristics of High-Voltage 4H-SiC p-type Gate Turn-off Thyristors. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 3910-3915.  | 3.0  | 5         |
| 15 | Effect of germanium doping on the formation kinetics of vacancy-dioxygen complexes in high dose neutron irradiated crystalline silicon. <i>Journal of Applied Physics</i> , 2017, 122, 095704.  | 2.5  | 4         |
| 16 | Optimized phosphorus diffusion process and performance improvement of c-Si solar cell by eliminating SiP precipitates in the emitter. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 13820-13825.  | 2.2  | 3         |
| 17 | Boron deactivation in heavily boron-doped Czochralski silicon during rapid thermal anneal: Atomic level understanding. <i>Applied Physics Letters</i> , 2014, 104, 032102.  | 3.3  | 2         |
| 18 | Effect of Germanium Doping on the Production and Evolution of Divacancy Complexes in Neutron Irradiated Czochralski Silicon. <i>Journal of Electronic Materials</i> , 2018, 47, 5019-5024.  | 2.2  | 2         |

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|----|---|-----|-----------|
| 19 | Electronic and doping properties of hexagonal silicon carbide with stacking faults induced cubic inclusions. Journal of Applied Physics, 2021, 129, .   | 2.5 | 2         |
| 20 | Enhanced internal gettering in n/n+ epitaxial silicon wafer: coaction of nitrogen impurity and vacancy on oxygen precipitation in substrate. Journal of Materials Science: Materials in Electronics, 2014, 25, 3486-3491. | 2.2 | 1         |
| 21 | Carbon effect on the survival of vacancies in Czochralski silicon during rapid thermal anneal. Journal of Applied Physics, 2017, 122, 045705.   | 2.5 | 1         |
| 22 | Studies of annealing of point defects and their influence on the electrical degradation and recovery behaviors of heavily neutron irradiated silicon. Radiation Effects and Defects in Solids, 2018, 173, 1018-1026.      | 1.2 | 1         |
| 23 | Forward Voltage Drop Induced by an Abnormal Threading Dislocation Aggregation in 4H-SiC GTO Devices. Materials, 2019, 12, 4042.   | 2.9 | 1         |
| 24 | Effect of Ultraviolet Irradiation on 4H-SiC PiN Diodes Characteristics. Nanoscale Research Letters, 2021, 16, 141.  | 5.7 | 1         |
| 25 | Influence of ion implantation and high temperature Ar annealing on carrier lifetime in n-type 4H-SiC epilayers. , 2020, , .   |     | 0         |