

Xing Zhou

List of Publications by Year in descending order

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48
papers

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48
times ranked

415
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Enabling Monolithic Heterogeneously Integrated Si/III-V Technology Platform. , 2021, , . | | 0 |
| 2 | High-Frequency Characteristics of InGaP/GaAs Double Heterojunction Bipolar Transistor Epitaxially Grown on 200 mm Ge/Si Wafers. IEEE Journal of the Electron Devices Society, 2020, 8, 122-125. | 1.2 | 2 |
| 3 | Hybrid III-V/Si-CMOS PDK for Monolithic Heterogeneously-Integrated III-V/Si Technology Platforms. , 2020, , . | | 1 |
| 4 | Monolithic Co-integration of III-V Materials into Foundry Si-CMOS in a Single Chip for Novel Integrated Circuits. , 2019, , . | | 0 |
| 5 | Reduction of Current Collapse in GaN (MIS)-HEMTs Using Dual Material Gate. , 2019, , . | | 1 |
| 6 | Monolithic III-V/CMOS Co-integrated Technology, Scalable Compact Modeling, and Hybrid Circuit Design. , 2018, , . | | 2 |
| 7 | In _{0.49} Ga _{0.51} P/GaAs heterojunction bipolar transistors (HBTs) on 200 mm Si substrates: Effects of base thickness, base and sub-collector doping concentrations. AIP Advances, 2018, 8, 115132. | 0.6 | 10 |
| 8 | Impact of Subthreshold Carrier Statistics on the Low-Frequency Noise in MOSFETs. IEEE Transactions on Electron Devices, 2017, 64, 1702-1707. | 1.6 | 2 |
| 9 | A New Interpretation for the Anomalous Channel-Length Dependence of Low-Frequency Noise in Quasi-Ballistic Transistors. IEEE Electron Device Letters, 2017, 38, 1113-1116. | 2.2 | 0 |
| 10 | Analytical models for channel potential and drain current in AlGaIn/GaN HEMT devices. , 2017, , . | | 1 |
| 11 | Effect of metal work function on the DC characteristics of an asymmetric MOSFET with Schottky-based source. , 2016, , . | | 1 |
| 12 | An on-chip integrated III-V / CMOS 125MSps 6-bit SAR ADC. , 2016, , . | | 0 |
| 13 | A Comprehensive Compact Model for GaN HEMTs, Including Quasi-Steady-State and Transient Trap-Charge Effects. IEEE Transactions on Electron Devices, 2016, 63, 1478-1485. | 1.6 | 30 |
| 14 | Unified regional fermi-potential-based compact model for double heterostructure HEMTs. , 2016, , . | | 1 |
| 15 | Unified HEMT/CMOS compact models for future heterogeneous III-V/Si co-integrated technology. , 2016, , . | | 0 |
| 16 | Quasi-2D Surface-Potential-Based Critical Length for Drift-Diffusion. IEEE Electron Device Letters, 2016, 37, 1051-1054. | 2.2 | 2 |
| 17 | GaN HEMT compact model for circuit simulation. , 2015, , . | | 3 |
| 18 | Compact electrical/optical model for InGaIn/GaN quantum-well based LEDs. , 2015, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Compact modeling of III-V/Si FETs. , 2014, , . | | 0 |
| 20 | Floating-Body Effect in Partially/Dynamically/Fully Depleted DG/SOI MOSFETs Based on Unified Regional Modeling of Surface and Body Potentials. IEEE Transactions on Electron Devices, 2014, 61, 333-341. | 1.6 | 4 |
| 21 | Compact Fermi potential model for heterostructure HEMTs with rectangular quantum well. , 2014, , . | | 4 |
| 22 | Compact Zero-Temperature Coefficient Modeling Approach for MOSFETs Based on Unified Regional Modeling of Surface Potential. IEEE Transactions on Electron Devices, 2013, 60, 2164-2170. | 1.6 | 4 |
| 23 | The temperature dependent TCAD and SPICE modeling of AlGaIn/GaN HEMTs. , 2013, , . | | 0 |
| 24 | Quasi-Ballistic Transport Model for Graphene Field-Effect Transistor. IEEE Transactions on Electron Devices, 2013, 60, 2410-2414. | 1.6 | 11 |
| 25 | Unified regional modeling of GaN HEMTs with the 2DEG and DD formalism. , 2012, , . | | 2 |
| 26 | Unification of MOS compact models with the unified regional modeling approach. Journal of Computational Electronics, 2011, 10, 121-135. | 1.3 | 13 |
| 27 | Subcircuit Compact Model for Dopant-Segregated Schottky Gate-All-Around Si-Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2010, 57, 772-781. | 1.6 | 25 |
| 28 | Test Structure for Characterization of Low-Frequency Noise in CMOS Technologies. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 1860-1865. | 2.4 | 12 |
| 29 | A Compact Model for Undoped Silicon-Nanowire MOSFETs With Schottky-Barrier Source/Drain. IEEE Transactions on Electron Devices, 2009, 56, 1100-1109. | 1.6 | 40 |
| 30 | Investigation of Low-Frequency Noise in N-Channel FinFETs From Weak to Strong Inversion. IEEE Transactions on Electron Devices, 2009, 56, 2800-2810. | 1.6 | 22 |
| 31 | Investigation of Low-Frequency Noise in Silicon Nanowire MOSFETs in the Subthreshold Region. IEEE Electron Device Letters, 2009, 30, 668-671. | 2.2 | 43 |
| 32 | Impact of Gate Electrodes on $1/f$ Noise of Gate-All-Around Silicon Nanowire Transistors. IEEE Electron Device Letters, 2009, 30, 1081-1083. | 2.2 | 24 |
| 33 | Atomistic modeling of the electrostatic and transport properties of a simplified nanoscale field effect transistor. Journal of Computational Electronics, 2008, 7, 500-508. | 1.3 | 3 |
| 34 | A Compact Model Satisfying Gummel Symmetry in Higher Order Derivatives and Applicable to Asymmetric MOSFETs. IEEE Transactions on Electron Devices, 2008, 55, 624-631. | 1.6 | 24 |
| 35 | Rigorous Surface-Potential Solution for Undoped Symmetric Double-Gate MOSFETs Considering Both Electrons and Holes at Quasi NonEquilibrium. IEEE Transactions on Electron Devices, 2008, 55, 616-623. | 1.6 | 31 |
| 36 | Unified Compact Modeling of Emerging Multiple-Gate MOSFETs. , 2007, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | Surface-Potential Solution for Generic Undoped MOSFETs With Two Gates. IEEE Transactions on Electron Devices, 2007, 54, 169-172. | 1.6 | 32 |
| 38 | Effect of substrate doping on the capacitance-Voltage characteristics of strained-silicon pMOSFETs. IEEE Electron Device Letters, 2006, 27, 62-64. | 2.2 | 17 |
| 39 | Implicit Analytical Surface/Interface Potential Solutions for Modeling Strained-Si MOSFETs. IEEE Transactions on Electron Devices, 2006, 53, 3110-3117. | 1.6 | 4 |
| 40 | Physics-Based Single-Piece Charge Model for Strained-Si MOSFETs. IEEE Transactions on Electron Devices, 2005, 52, 1555-1562. | 1.6 | 16 |
| 41 | Source-Drain Symmetry in Unified Regional MOSFET Model. IEEE Electron Device Letters, 2004, 25, 311-313. | 2.2 | 7 |
| 42 | The missing link to seamless simulation. IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems, 2003, 19, 9-17. | 0.8 | 4 |
| 43 | Unified MOSFET compact I-V model formulation through physics-based effective transformation. IEEE Transactions on Electron Devices, 2001, 48, 887-896. | 1.6 | 22 |
| 44 | Exploring the novel characteristics of hetero-material gate field-effect transistors (HMGFETs) with gate-material engineering. IEEE Transactions on Electron Devices, 2000, 47, 113-120. | 1.6 | 89 |
| 45 | A general approach to compact threshold voltage formulation based on 2D numerical simulation and experimental correlation for deep-submicron ULSI technology development [CMOS]. IEEE Transactions on Electron Devices, 2000, 47, 214-221. | 1.6 | 27 |
| 46 | Numerical investigation of subpicosecond electrical pulse generation by edge illumination of silicon transmission-line gaps. IEEE Journal of Quantum Electronics, 1998, 34, 171-178. | 1.0 | 2 |
| 47 | Numerical physics of subpicosecond electrical pulse generation by nonuniform gap illumination. IEEE Journal of Quantum Electronics, 1996, 32, 1672-1679. | 1.0 | 8 |
| 48 | Extraction of physical parameters of strained-silicon MOSFETs from C-V measurement. , 0, , . | | 5 |