



Huili (Grace) Xing

Prof. of ECE & MSE,
Cornell University

GaN
2D materials
devices
epitaxy
THz

GET MY OWN PROFILE

| | All | Since 2013 |
|-----------|------|------------|
| Citations | 9456 | 7067 |
| h-index | 51 | 43 |
| i10-index | 151 | 128 |

| TITLE | CITED BY | YEAR |
|--|----------|------|
| Broadband graphene terahertz modulators enabled by intraband transitions B Sensale-Rodriguez, R Yan, MM Kelly, T Fang, K Tahy, WS Hwang, ... Nature communications 3, 780 | 492 | 2012 |
| Carrier statistics and quantum capacitance of graphene sheets and ribbons T Fang, A Konar, H Xing, D Jena Applied Physics Letters 91 (9), 092109 | 474 | 2007 |
| Exciton dynamics in suspended monolayer and few-layer MoS2 2D crystals H Shi, R Yan, S Bertolazzi, J Brivio, B Gao, A Kis, D Jena, HG Xing, ... ACS nano 7 (2), 1072-1080 | 343 | 2013 |
| Polarization-induced hole doping in wide-band-gap uniaxial semiconductor heterostructures J Simon, V Protasenko, C Lian, H Xing, D Jena Science 327 (5961), 60-64 | 328 | 2010 |
| High breakdown voltage AlGaIn-GaN HEMTs achieved by multiple field plates H Xing, Y Dora, A Chini, S Heikman, S Keller, UK Mishra IEEE Electron Device Letters 25 (4), 161-163 | 304 | 2004 |
| Heavy doping effects in Mg-doped GaN P Kozodoy, H Xing, SP DenBaars, UK Mishra, A Saxler, R Perrin, ... Journal of Applied Physics 87 (4), 1832-1835 | 287 | 2000 |
| Thermal conductivity of monolayer molybdenum disulfide obtained from temperature-dependent Raman spectroscopy R Yan, JR Simpson, S Bertolazzi, J Brivio, M Watson, X Wu, A Kis, T Luo, ... ACS nano 8 (1), 986-993 | 244 | 2014 |
| InAlN/AlN/GaN HEMTs with regrown ohmic contacts and f_{T} of 370 GHz Y Yue, Z Hu, J Guo, B Sensale-Rodriguez, G Li, R Wang, F Faria, T Fang, ... IEEE Electron Device Letters 33 (7), 988-990 | 231 | 2012 |
| Mobility in semiconducting graphene nanoribbons: Phonon, impurity, | 216 | 2008 |

and edge roughness scattering

T Fang, A Konar, H Xing, D Jena
Physical Review B 78 (20), 205403

Graphene nanoribbon tunnel transistors

Q Zhang, T Fang, H Xing, A Seabaugh, D Jena
IEEE Electron Device Letters 29 (12), 1344-1346

207 2008

Transistors with chemically synthesized layered semiconductor WS₂ exhibiting 105 room temperature modulation and ambipolar behavior

W Sik Hwang, M Remskar, R Yan, V Protasenko, K Tahy, S Doo Chae, ...
Applied Physics Letters 101 (1), 013107

155 2012

Polarization-enhanced Mg doping of AlGa_N/Ga_N superlattices

P Kozodoy, YP Smorchkova, M Hansen, H Xing, SP DenBaars, UK Mishra, ...
Applied Physics Letters 75 (16), 2444-2446

152 1999

Al_N/Ga_N insulated-gate HEMTs with 2.3 A/mm output current and 480 mS/mm transconductance

T Zimmermann, D Deen, Y Cao, J Simon, P Fay, D Jena, HG Xing
IEEE Electron Device Letters 29 (7), 661-664

144 2008

Unique prospects for graphene-based terahertz modulators

B Sensale-Rodriguez, T Fang, R Yan, MM Kelly, D Jena, L Liu, H Xing
Applied Physics Letters 99 (11), 113104

141 2011

Extraordinary control of terahertz beam reflectance in graphene electro-absorption modulators

B Sensale-Rodriguez, R Yan, S Rafique, M Zhu, W Li, X Liang, ...
Nano letters 12 (9), 4518-4522

135 2012

Gallium nitride based transistors

H Xing, S Keller, YF Wu, L McCarthy, IP Smorchkova, D Buttari, R Coffie, ...
Journal of Physics: Condensed Matter 13 (32), 7139

124 2001

Novel gate-recessed vertical InAs/GaSb TFETs with record high I_{ON} of 180 μ A/ μ m at V_{DS}= 0.5 V

G Zhou, R Li, T Vasen, M Qi, S Chae, Y Lu, Q Zhang, H Zhu, JM Kuo, ...
Electron Devices Meeting (IEDM), 2012 IEEE International, 32.6. 1-32.6. 4

123 2012

AlGaSb/InAs Tunnel Field-Effect Transistor With On-Current of 78 μ A/ μ m at 0.5 V

R Li, Y Lu, G Zhou, Q Liu, SD Chae, T Vasen, WS Hwang, Q Zhang, P Fay, ...
IEEE electron device letters 33 (3), 363-365

122 2012

Presence and origin of interface charges at atomic-layer deposited Al₂O₃/III-nitride heterojunctions

S Ganguly, J Verma, G Li, T Zimmermann, H Xing, D Jena
Applied physics letters 99 (19), 193504

113 2011

Realization of wide electron slabs by polarization bulk doping in graded III-V nitride semiconductor alloys

D Jena, S Heikman, D Green, D Buttari, R Coffie, H Xing, S Keller, ...

100 2002

Applied physics letters 81 (23), 4395-4397