

# Abdelouahad El Fatimy

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

1,473  
citations

361413

20  
h-index

414414

32  
g-index

48  
all docs

48  
docs citations

48  
times ranked

1231  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Field Effect Transistors for Terahertz Detection: Physics and First Imaging Applications. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 1319.       | 2.2  | 199       |
| 2  | Resonant and voltage-tunable terahertz detection in InGaAs <sup>+</sup> InP nanometer transistors. Applied Physics Letters, 2006, 89, 131926.                         | 3.3  | 192       |
| 3  | AlGaIn/GaN high electron mobility transistors as a voltage-tunable room temperature terahertz sources. Journal of Applied Physics, 2010, 107, .                       | 2.5  | 133       |
| 4  | Room-temperature terahertz emission from nanometer field-effect transistors. Applied Physics Letters, 2006, 88, 141906.   | 3.3  | 122       |
| 5  | Epitaxial graphene quantum dots for high-performance terahertz bolometers. Nature Nanotechnology, 2016, 11, 335-338.  | 31.5 | 116       |
| 6  | Terahertz detection by GaN/AlGaIn transistors. Electronics Letters, 2006, 42, 1342.   | 1.0  | 96        |
| 7  | Room temperature tunable detection of subterahertz radiation by plasma waves in nanometer InGaAs transistors. Applied Physics Letters, 2006, 89, 222109.              | 3.3  | 67        |
| 8  | Terahertz imaging with GaAs field-effect transistors. Electronics Letters, 2008, 44, 408.   | 1.0  | 54        |
| 9  | Broadband terahertz imaging of documents written with lead pencils. Optics Communications, 2009, 282, 3104-3107.  | 2.1  | 54        |
| 10 | Ballistic and pocket limitations of mobility in nanometer Si metal-oxide semiconductor field-effect transistors. Applied Physics Letters, 2005, 87, 053507.           | 3.3  | 44        |
| 11 | Field Effect Transistors for Terahertz Detection and Emission. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 618-628.                               | 2.2  | 40        |
| 12 | Highly sensitive MoS <sub>2</sub> photodetectors with graphene contacts. Nanotechnology, 2018, 29, 20LT01.  | 2.6  | 38        |
| 13 | Ambient effects on photogating in MoS <sub>2</sub> photodetectors. Nanotechnology, 2019, 30, 284004.  | 2.6  | 36        |
| 14 | Terahertz Emission from Collapsing Field Domains during Switching of a Gallium Arsenide Bipolar Transistor. Physical Review Letters, 2007, 99, 176601.                | 7.8  | 30        |
| 15 | Plasma wave field effect transistor as a resonant detector for 1 terahertz imaging applications. Optics Communications, 2009, 282, 3055-3058.                         | 2.1  | 28        |
| 16 | Ultra-broadband photodetectors based on epitaxial graphene quantum dots. Nanophotonics, 2018, 7, 735-740.   | 6.0  | 28        |
| 17 | Broadening of the plasmon resonance due to plasmon-plasmon intermode scattering in terahertz high-electron-mobility transistors. Applied Physics Letters, 2008, 93, . | 3.3  | 27        |
| 18 | Phosphorene—“an emerging two-dimensional material: recent advances in synthesis, functionalization, and applications. 2D Materials, 2022, 9, 032001.                  | 4.4  | 25        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Electron mobility in quasi-ballistic Si MOSFETs. Solid-State Electronics, 2006, 50, 632-636.  | 1.4  | 24        |
| 20 | Application of plasmon-resonant microchip emitters to broadband terahertz spectroscopic measurement. Journal of the Optical Society of America B: Optical Physics, 2009, 26, A52.   | 2.1  | 21        |
| 21 | Effect of defect-induced cooling on graphene hot-electron bolometers. Carbon, 2019, 154, 497-502.   | 10.3 | 15        |
| 22 | Plasma wave resonant detection of terahertz radiations by nanometric transistors. Low Temperature Physics, 2007, 33, 291-294.   | 0.6  | 14        |
| 23 | Plasma oscillations in nanotransistors for room temperature detection and emission of terahertz radiation. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 244-248.                              | 0.8  | 13        |
| 24 | Plasma excitations in field effect transistors for terahertz detection and emission. Comptes Rendus Physique, 2010, 11, 433-443.  | 0.9  | 12        |
| 25 | Nanostructured graphene for nanoscale electron paramagnetic resonance spectroscopy. JPhys Materials, 2020, 3, 014013.   | 4.2  | 11        |
| 26 | Field effect transistors for terahertz imaging. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 2828-2833.   | 0.8  | 9         |
| 27 | Adjustment of Terahertz Properties Assigned to the First Lowest Transition of (D+, X) Excitonic Complex in a Single Spherical Quantum Dot Using Temperature and Pressure. Applied Sciences (Switzerland), 2021, 11, 5969. | 2.5  | 4         |
| 28 | Room temperature detection and emission of Terahertz radiation by plasma oscillations in nanometer size transistors. , 2007, , .  |      | 3         |
| 29 | Influence of ballistic and pocket effects on electron mobility in si MOSFETs. , 0, , .  |      | 2         |
| 30 | Room-temperature terahertz emission from nanometer field-effect transistors. , 2006, , .  |      | 2         |
| 31 | Terahertz plasmon-resonant microchip emitters and their possible sensing and spectroscopic applications. , 2009, , .  |      | 2         |
| 32 | Tunable room temperature terahertz sources based on two dimensional plasma instability in GaN HEMTs. Journal of Physics: Conference Series, 2009, 193, 012072.  | 0.4  | 2         |
| 33 | THz communication system based on a THz Quantum Cascade Laser and a Hot Electron Bolometer. , 2010, , .   |      | 2         |
| 34 | Nanotransistor based THz plasma detectors: low temperatures, graphene, linearity, and circular polarization studies. , 2013, , .  |      | 2         |
| 35 | THz Emission Related to Hot Plasmons and Plasma Wave Instability in Field Effect Transistors. Acta Physica Polonica A, 2011, 120, 924-926.  | 0.5  | 2         |
| 36 | Terahertz Emission and Detection by Plasma Waves in Nanometer Size Field Effect Transistors. IEICE Transactions on Electronics, 2006, E89-C, 926-930.   | 0.6  | 2         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Nitride based nanotransistors as new sources and detectors of THz radiations. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1947-1949.   | 0.8 | 1         |
| 38 | Terahertz Detection of Quantum Cascade Laser Emission by Plasma Waves in Field Effect Transistors. Acta Physica Polonica A, 2011, 120, 930-932.   | 0.5 | 1         |
| 39 | Plasma Wave HEMTs for THz applications. , 2006, , .   |     | 0         |
| 40 | Terahertz Detection Related to Plasma Excitations in Nanometer Gate Length Field Effect Transistor.. Materials Research Society Symposia Proceedings, 2006, 958, 1.   | 0.1 | 0         |
| 41 | Plasmon-plasmon scattering in two-dimensional electron channel of a terahertz nanotransistor. , 2008, , .   |     | 0         |
| 42 | Room temperature terahertz imaging by a GaAs-HEMT transistor associated with a THz time domain spectrometer. , 2008, , .  |     | 0         |
| 43 | Tunable room temperature THz emission from AlGaIn/GaN high electron mobility transistors. , 2010, , .   |     | 0         |
| 44 | Room temperature Terahertz hot electron bolometric detector based on AlGaAs/GaAs two dimensional electron gas. , 2010, , .  |     | 0         |
| 45 | Terahertz detection by field effect transistors security imaging. Proceedings of SPIE, 2011, , .  | 0.8 | 0         |
| 46 | Temperature, back gate and polarization studies in nanotransistor based THz plasma detectors. , 2013, , .   |     | 0         |
| 47 | Plasmon-resonant Microchip Emitters and Their Applications to Terahertz Spectroscopy. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2009, 5, 341-345. | 0.4 | 0         |
| 48 | Nanostructured epitaxial graphene for ultra-broadband optoelectronic detectors (Conference) Tj ETQq0 0 0 rgBT /Overlock 1Q Tf 50 302  |     |           |