**Scopus – Author’s details -Knap, W. (Nov 26, 2020)**

Laboratoire Charles Coulomb, Montpellier, France

Author ID: 7004426989

http://orcid.org/0000-0003-4537-8712

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**1.1 JOURNAL PAPERS (273)**

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List of invited papers followed by Journal papers and Conference papers:

**1.2 INVITED and TUTORIAL (117)**

117. *(tutorial)* **W. Knap**, et al, **"Transistors based THz detectors - from basic physics to first real world applications."**, European Solid Deuce Research Conference, Cracow, Poland, 22–26 September 2019

116. *(tutorial)* **W. Knap**, et al, **"Terahertz Plasma Oscillations in Field Effect Transistors: from Basic Physics to Applications (>25 Years History)."**, 8th Russia-Japan-USA-Europe Symposium on Fundamental & Applied Problems of Terahertz Devices & Technologies & GDR-I FIR-LAB Workshop Nizhny Novgorod, Nizhny Novgorod, Russia, 8 August 2019

115. *(invited)* **W. Knap**, et al, **"THz cyclotron emission from bulk HgCdRe alloys."**, 29th International Travelling Summer School (ITSS) on Microwaves and Lightwaves, Frankfurt, Germany, 13–19 July 2019

114. *(invited)* **W. Knap**, et al, **"THz cyclotron emission from Dirac-like fermions in bulk HgCdTe."**, International Workshop of FIR-LAB network, Nizhny Novgorod, Russia, 7 July 2019

113. *(tutorial)* **W. Knap**, et al, **"Tutorial Terahertz plasma oscillations in Nanotransistors-Basic Science and Applications."**, XXIII International Symposium "Nanophysics & Nanoelectronics" Nizhny Novgorod, Nizhny Novgorod, Russia, 10–14 March 2019

112. *(invited)* **W. Knap**, et al, **"Field Effect Transistors Based Terahertz Detectors 25 Years History, State of the Art and Future Directions."**, 43rd International Conference on Infrared, Milimeter and Terahertz Waves, Nagoya, Japan, 9–14 September 2018

111. *(invited)* **W. Knap**, et al, **"New GaN FETs and Silicon Junctionless Field Effect Transistor Terahertz Detectors."**, Frontiers of photonics, plasmonics and electronics with 2D nanosystems, Erice, Italy, 14–20 July 2018

110. *(invited)* **W. Knap**, et al, **"New GaN and Silicon Junctionless Field Effect Transistor Terahertz Detectors."**, 9th International Conference Materials Science and Condensed Matter Physics, Chisinau, Republic of Moldova, 25–28 September 2018

109. *(oral)* **W. Knap**, et al, **"Topological Phases of HgTe Quantum Wells for QHE resistance standard applications."**, 7th Russia-Japan-USA-Europe Symposium on Fundamental & Applied Problems of Terahertz Devices & Technologies & 4th TERAMIR International Laboratory Workshop, Warsaw, Poland, 17–21 September 2018

108. *(oral)* **W. Knap**, et al, **"EdgeFET Based on AlGaN/GaN with Two Lateral Schottky Barrier Gates Towards Resonant Terahertz Detection."**, 7th Russia-Japan-USA-Europe Symposium on Fundamental & Applied Problems of Terahertz Devices & Technologies & 4th TERAMIR International Laboratory Workshop, Warsaw, Poland, 17–21 September 2018

107. *(invited)* **W. Knap**, et al, **"Terahertz Vision Using Field Effect Transistors Detectors Arrays."**, 22nd International Microwave and Radar Conference (MIKON 2018), Poznan, Poland, 15–17 May 2018

106. *(invited)* **W. Knap**, et al, **"Terahertz imaging and wireless communication with nanometer field effect transistor arrays."**, International Symposium on Photonics and Optical Communications (ISPOC 2017) Katahira - Sendai - Japan, November 2017

105. *(invited)* **W. Knap**, et al, **“Terahertz Imaging With GaAs and GaN Plasma Field Effect Transistors Detectors Arrays”**, 4th International Symposium on Microwave and Terahertz Science and Applications 2017, Okayama- Japan, November 19-23, 2017

**104. (PLENARY)W. Knap**, et al, **“Terahertz Imaging and Wireless Communication with Nanometer Field Effect Transistor Arrays”**, 17 th International Conference on Emerging Technologies ETMOS , Warsaw, May 28 - 30, 2017

103. *(invited)* **W. Knap**, D. But, F. Teppe J. Suszek, A. M. Siemion, M. Sypek, G. Cywinski, **“Terahertz Plasma Field Effect Transistors: From Basic Physics to First Postal Scanners Imaging Applications”**, 46rd European Microwave Conference 2016, London, October 3-7 2016

102. **(PLENARY)W. Knap**, et al **“PLASMA FIELD EFFECT TRANSISTOR ARRAYS FOR IMAGING IN SUB-THZ ATMOSPHERIC WINDOWS”**, 5th Russia-Japan-USA-Europe Symposium on Fundamental and Applied Problems of Terahertz Devices and Technologiers RJUSE TeraTech 2016, Sendai- Japan , Oct31-Nov1 June 2016

101. **(PLENARY)W. Knap** et al., **“Terahertz Plasma FETs - First Imaging Applications”**, Emerging Technologies 2016 Conference, Montreal, May 25 – 27, 2016

100. **(PLENARY)W. Knap** et al., **“Terahertz Plasma Field Effect Transistors: From Basic Physics to First Imaging Applications”,** International Workshop on "Terahertz Science, Nanotechnologies and Applications" – Erice (Sicily), Italy - July 16-22, 2016

99. *( invited)* **W. Knap**, N. Dyakonova, D. But, F. Teppe J. Suszek, A. M. Siemion, M. Sypek, G. Cywinski, K. Szkudlarek, I. Yahniuk, **“Terahertz Imaging With GaAs and GaN Plasma Field Effect Transistors Detectors Arrays”**, 23rd International Conference Mixed Design of Integrated Circuits and Systems MIXDES 2016, Lodz, 23-25 June 2016

98. **(PLENARY)W. Knap**, B. Moulin, M. Sypek, D. Coquillat, G. Cywinski, J. Suszek, M. Triki, D. But, A.Siemion, K. Szkudlarek, C. Archier, N. Dyakonova, T. Antonini, F. Teppe **“Plasma Field Effect Transistors Arrays for Amplitude and Polarization Imaging in THz Range”**, 8th International Conference on Materials Science and Condensed Matter Physics, September 12-16, 2016, Chisinau, Moldova

97. **W. Knap**, D. But, D. Coquillat, N. Dyakonova, F. Teppe, **“Terahertz Imaging by Field Effect Transistors”,** Conference 21st International Conference on Microwave, Radar and Wireless Communications, MIKON 2016, May 9-11, Krakow 2016

96. **W. Knap**, N. Dyakonova, D. But, F. Teppe, M. Sypek, J. Suszek, A. Wolos, G. Cywinski, K.Szkudlarek, I.Yahniuk, **“Physics and Applications of Field Effect Transistors for Terahertz Imaging”,** Energy Materials Nanotechnology Meeting on Terahertz 2016 San Sebastian Spain May 14-18 2016

95. **W. Knap**, M. Sypek, D. B. But, N. Dyakonova, D. Coquillat, F. Teppe, E. Kling, **“Terahertz Imaging with Nanometer Field Effect Transistors for Security Screening”,** Paris –OPTRO 7th International Symposium on Optronics in Defense and Security, Paris 2-4 February 2016

94. **W. Knap** et al., **“Terahertz science and technology - achievements and future perspectives of French-Polish collaborative projects”,** French-Polish Forum of Research and Innovations, Krakow, 8 June 2016.

93. **W. Knap**, D. B. But, N. Dyakonova, D. Coquillat, F. Teppe, M. Vitiello, S. D. Ganichev, M. Sypek, **“Terahertz Detectors Based on Plasma Oscillations in Nanometer Field Effect Transistors”,** 9th Workshop on Frontiers in Electronics (WOFE-2015) will be held on December 15-18, 2015, in the Caribe Hilton Hotel, San Juan, Puerto Rico, USA.

92. **W. Knap**, J. Suszek, D. Coquillat, G. Cywinski, N. Dyakonova, F. Teppe, M. Sypek, **“Terahertz Plasma FETs from Basic Physics to First Fast Terahertz Scanners for Detection of Explosives and CBRN”,**

NATO ARW on THz Diagnostics of CBRN effects and Detection of Explosives & CBRN, Izmir, Turkey 3-6 November 2015

91. **W. Knap**, and M. Sypek **“Terahertz Imaging with Field Effect Transistors”**

European Microwave Week EuMW 2015: Paris September 6-11, 2015

90. **(PLENARY)** W.Knap 2nd “Terahertz Imaging and Broadband Wireless Communication Using

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89. **(PLENARY)**W .Knap et al “ From Basic Physics to Applications of THz Nanotransistors” 4th Russian-Japan-USA Symposium (RJUS-2015) on Fundamental & Applied Problems of Terahertz Devices & Technologies "RJUS TeraTech-2015", Chernogolovka Russia June 9-12, 2015

88. **(PLENARY)** W.Knap “ Terahertz Excitations in Terahertz Nanotransistors” (Plenary) 19th Symposium on Nanophysics an Nanotechnology Nizny Novgorod Russia March 10-14 2015

87. W.Knap et al “Plasma Oscillations in Field Effect Transistors for Room Temperature Terahertz Imaging Applications” 3rd International Symposium on Microwave/THz Science and Technology MTSA 15 Okinawa, Japan June 2015

86. W.Knap et al “ Terahertz Detection by Plasma Waves Nonlinearities – in semiconductors and topological insulator systems” Russian Conference on Semiconductor Photonic Problems Novosibirsk Russia October 12-16 2015

85. W.Knap et al “ Terahertz Communication with Nanometer Field Effect Transistors – project WITH” 11th Japan-French Workshop on Nanomaterials Rennes France 27-30 May 2015

84. W.Knap “Physics of Terahertz Field Effect Transistor Detectors” European Optical Society (EOS) organizes the 4th topical meeting on Terahertz Science & Technology in Camogli (Italy), 11–14 May 2014

83. W.Knap, D.But, N.Diakonova, F.Teppe, D.Coquillat, “Terahertz FETs for Laser Aplications”

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82. (Plenary) W.Knap , N.Diakonova et al “THz plasma oscillations in semiconductor nanostructures: physics and applications”, ”7th International Conference on Materials Science and Condensed Matter Physics (MSCMP 2014), Kishiniev, Moldavia Sept 16-19 2014

81. W.Knap et al “Physics of THz excitation in Nanometric Semiconductor Structures” International Training School in Terahertz, Infrared and Millimetre-Wave technology and its Application to Sensing and Imaging

School of Electronic and Electrical Engineering, University of Leeds, UK 14 - 16 July 2014 –

80. W.Knap, D.But, N.Diakonova, F.Teppe, D.Coquillat “Physical Limits of Terahertz Plasma Transistors” 5th Int. Symposium on Terahertz Nanoscience, Martinique, December 2014

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76. W.Knap, S.Rumyantcev “Physical limitations of Terahertz Detectors based on FETs”, International Workshop on Terahertz Science and Technology OTST Kyoto Japan April 2013

75. Knap “Overview on physical limits of Terahertz Field Effect Transistors”, 38th Int. Conf. on Infrared, Millimeter and THz Waves Mainz –Germany Sept 1-6 2013

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