

Brevets et droit de propriété intellectuelle

1. F. Blanchard, A. Doi, “Electro-optic balanced imaging detection for near-field terahertz imaging,” Japanese patent, ref. number: 2010-238869. (2010).
2. F. Blanchard, A. Doi, “Micro crystal characterization by near-field terahertz microscopy using phonon-polaritons waves,” Japanese patent, (2011).
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1. F. Blanchard, and K. Tanaka, “Improving time and space resolutions in the electro optics sampling for near-field THz imaging”, Opt. Letters, **accepted** (2016).
 2. L. Gingras, F. Blanchard, M. Georgan, and D. G. Cooke, “Dynamic creation of a light-induced terahertz guided-wave resonator,” Opt. Express, **24**, 2496 (2016).
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 4. H. Hassan, I. Al-Naib, M. M. Dignam, Y. Sekine, K. Oguri, F. Blanchard, D. G. Cooke, S. Tanaka, F. Komori, H. Hibino, and T. Ozaki, “Nonlinear terahertz field-induced carrier dynamics in photoexcited epitaxial monolayer graphene,” Phys. Rev. B, **91**, 035422 (2015).
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 9. T. Tanaka, A. Doi, and F. Blanchard, “Development of a real-time terahertz near-field microscope,” Oyo Buturi **82**(2), 158 (2013). (*Japanese*)
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11. S. Tani, F. Blanchard, and K. Tanaka, “Ultrafast carrier dynamics in graphene under a high electric field,” *Phys. Rev. Lett.* **109**, 166603 (2012).
12. F. Blanchard, K. Ooi, T. Tanaka, A. Doi, and K. Tanaka, “Terahertz spectroscopy of the reactive and radiative near-field zones of split ring resonator,” *Opt. Express* **20**, 19395-19403 (2012).
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17. F. Blanchard, G. Sharma, L. Razzari, X. Ropagnol, H.-C. Bandulet, F. Vidal, R. Morandotti, J.-C. Kieffer, T. Ozaki, H. F. Tiedje, H. K. Haugen, M. Reid, and F. A. Hegmann, “Generation of intense THz radiation via optical methods,” *Selected Topics in Quantum Electronics, IEEE Journal*, **Invited**, **17**, 5-16 (2011).

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 3. F. Blanchard, H. S. Razavipour, H. Hafez, X. Ropagnol, R. Morandotti, T. Ozaki, M. Bolduc, and D. G. Cooke, “Scaling up of intense terahertz pulses pumped with 800 nm light pulse,” *Science and Innovations, CLEO-SI*, San Jose, CA, USA, June 8-13, (2014).
 4. F. Blanchard, et al., “Subwavelength terahertz spectroscopy of methanol trapping in porous coordination polymer nanocrystals,” *Optical Terahertz Science and Technology (OTST)*, **First prize**: poster presentation, Kyoto (2013).
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discontinuity in split ring resonator array,” XVIIIth International Conference on Ultrafast phenomena, Lausanne, Switzerland (2012).

6. F. Blanchard, A. Doi, T. Tanaka, H. Hirori, and K. Tanaka, “Near-field THz Imaging of field enhancement,” Optical Terahertz Science and Technology (OTST), Santa Barbara (2011).
7. F. Blanchard, A. Doi, T. Tanaka, and K. Tanaka, “Spectroscopic imaging of tyrosine using a real-time terahertz near-field microscope,” Second international THz bio workshop, Seoul (2011).

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1. F. Blanchard, et al., The dawn of ultrafast nonlinear optics in the terahertz regime. Nonlinear Photonics and Novel Optical Phenomena (Springer Series in Optical Sciences Ed. 2012)

Thèses (Ph.D. and M.Sc.)

1. F. Blanchard, Développement d’une source de radiation térahertz (THz) intense pour l’étude du transport des électrons chauds dans les semi-conducteurs. (Ph.D.)
 2. F. Blanchard, Génération d’ultrason haute fréquence par laser femtoseconde pour la caractérisation de films métalliques micrométriques. (M.Sc.)
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