Alexandre Locquet

List of Publications by Year in descending order

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105 papers 2,219 citations

257450 24 h-index 233421 45 g-index

106 all docs

106 docs citations

106 times ranked 1097 citing authors

| # | Article | IF | Citations |
|----|---|-----|-----------|
| 1 | Revealing inscriptions obscured by time on an early-modern lead funerary cross using terahertz multispectral imaging. Scientific Reports, 2022, 12, 3429. | 3.3 | 3 |
| 2 | Terahertz Dielectric Characterization of Low-Loss Thermoplastics for 6G Applications. International Journal of Wireless Information Networks, 2022, 29, 269-274. | 2.7 | 6 |
| 3 | Nondestructive characterization of nanoporous alumina films using terahertz scattering imaging. Surface and Coatings Technology, 2021, 408, 126792. | 4.8 | 4 |
| 4 | Microwave Frequency Comb Generation by Gain-Switching Versus Relaxation Oscillations. IEEE Photonics Technology Letters, 2021, 33, 491-494. | 2.5 | 9 |
| 5 | Terahertz Permittivity of Pressed ZnO and CuO Powder in Polyethylene Pellets: Effect of Porosity. IEEE Transactions on Terahertz Science and Technology, 2021, 11, 402-407. | 3.1 | 3 |
| 6 | Diagnosis of injection-molded weld lines in ABS thermoplastic by polarized terahertz reflective imaging. NDT and E International, 2021, 122, 102497. | 3.7 | 3 |
| 7 | Characterization of nanoporous alumina using terahertz reflectometry and scattering imaging. , 2021, , \cdot | | O |
| 8 | Terahertz Imaging for Paper Handling of Legacy Documents. Sensors, 2021, 21, 6756. | 3.8 | 3 |
| 9 | Terahertz Nondestructive Stratigraphic Analysis of Complex Layered Structures: Reconstruction Techniques. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 929-946. | 2.2 | 4 |
| 10 | Optical square-wave generation in a semiconductor laser with optoelectronic feedback. Optics Letters, 2021, 46, 6031. | 3.3 | 4 |
| 11 | Scanning acoustic microscopy investigation of weld lines in injection-molded parts manufactured from industrial thermoplastic polymer. Micron, 2020, 138, 102925. | 2.2 | 7 |
| 12 | Thickness characterization of multi-layer coated steel by terahertz time-of-flight tomography. NDT and E International, 2020, 116, 102358. | 3.7 | 19 |
| 13 | Pulsed THz imaging for thickness characterization of plastic sheets. NDT and E International, 2020, 116, 102338. | 3.7 | 20 |
| 14 | Terahertz Time-of-Flight Tomography Beyond the Axial Resolution Limit: Autoregressive Spectral Estimation Based on the Modified Covariance Method. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 926-939. | 2.2 | 19 |
| 15 | Staircase Dynamics of a Photonic Microwave Oscillator Based on a Laser Diode with Delayed Optoelectronic Feedback. Physical Review Applied, 2020, 13, . | 3.8 | 11 |
| 16 | Optical constants of CuO and ZnO particles in the terahertz frequency range. Ceramics International, 2020, 46, 24110-24119. | 4.8 | 9 |
| 17 | Routes to Chaos of a Semiconductor Laser Subjected to External Optical Feedback: A Review. Photonics, 2020, 7, 22. | 2.0 | 10 |
| 18 | Nondestructive measurement of mill-scale thickness on steel by terahertz time-of-flight tomography. Surface and Coatings Technology, 2020, 393, 125765. | 4.8 | 19 |

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|----|--|--------------|-----------|
| 19 | Characterization of nanoporous Al ₂ O ₃ films at terahertz frequencies. Optics Letters, 2020, 45, 4092. | 3.3 | 8 |
| 20 | Asymmetrical performance of a laser-based reservoir computer with optoelectronic feedback. Optics Letters, 2020, 45, 6150. | 3. 3 | 10 |
| 21 | Terahertz Characterization of Roman Amphora Sherds. , 2020, , . | | O |
| 22 | Resonances between fundamental frequencies for lasers with large delayed feedbacks. Physical Review E, 2019, 99, 062219. | 2.1 | 9 |
| 23 | Application of Ultrasonic Coda Wave Interferometry for Micro-cracks Monitoring in Woven Fabric Composites. Journal of Nondestructive Evaluation, 2019, 38, 1. | 2.4 | 11 |
| 24 | Ultrasound Evaluation of the Protector Role of the Pronator Quadratus Suture in Volar Plating. Journal of Ultrasound in Medicine, 2019, 38, 2785-2791. | 1.7 | 8 |
| 25 | Terahertz Non-Destructive Thickness Characterization of Optically Thin Scale Layers on Steel., 2019, , . | | 0 |
| 26 | THz Thickness Characterization of Plastic Sheets Including Dispersion. , 2019, , . | | 0 |
| 27 | Nanometric sensing with laser feedback interferometry. Optics Letters, 2019, 44, 903. | 3 . 3 | 8 |
| 28 | Low-noise x-band tunable microwave generator based on external cavity lasers. , 2019, , . | | 0 |
| 29 | Coexisting periodic regimes in semiconductor lasers with optical feedback., 2019,,. | | 0 |
| 30 | Multistate intermittency on the route to chaos of a semiconductor laser subjected to optical feedback from a long external cavity. Chaos, 2018, 28, 011102. | 2.5 | 9 |
| 31 | Crisis route to chaos in semiconductor lasers subjected to external optical feedback. Physical Review A, 2018, 97, . | 2.5 | 8 |
| 32 | Enhancing optical-feedback-induced chaotic dynamics in semiconductor ring lasers via optical injection. Nonlinear Dynamics, 2018, 92, 315-324. | 5.2 | 28 |
| 33 | Chaotic laser voltage: An electronic entropy source. Applied Physics Letters, 2018, 112, . | 3.3 | 6 |
| 34 | Visualization of subsurface damage in woven carbon fiber-reinforced composites using polarization-sensitive terahertz imaging. NDT and E International, 2018, 99, 72-79. | 3.7 | 37 |
| 35 | Discrete Relaxation Oscillation Frequency Hopping in Delayed-feedback Semiconductor Lasers. , 2018, , . | | 0 |
| 36 | Low-Noise X-Band Tunable Microwave Generator Based on a Semiconductor Laser With Feedback. IEEE Photonics Technology Letters, 2018, 30, 1597-1600. | 2.5 | 18 |

| # | Article | IF | CITATIONS |
|----|--|-------------|-----------|
| 37 | Terahertz pulsed imaging reveals the stratigraphy of a seventeenth-century oil painting., 2018,,. | | 1 |
| 38 | Feedback-induced discretisation of the relaxation oscillation frequency in a semiconductor laser. , 2018, , . | | 0 |
| 39 | External-cavity based optoelectronic oscillator stabilization (Conference Presentation)., 2018,,. | | 0 |
| 40 | Terahertz imaging for nondestructive testing of materials for aerospace, automotive, and energy (Conference Presentation). , 2018 , , . | | 0 |
| 41 | Terahertz Superresolution Stratigraphic Characterization of Multilayered Structures Using Sparse Deconvolution. IEEE Transactions on Terahertz Science and Technology, 2017, 7, 260-267. | 3.1 | 67 |
| 42 | Tunable X-Band Optoelectronic Oscillators Based on External-Cavity Semiconductor Lasers. IEEE Journal of Quantum Electronics, 2017, 53, 1-6. | 1.9 | 13 |
| 43 | Terahertz Quantitative Nondestructive Evaluation of Failure Modes in Polymer-Coated Steel. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-7. | 2.9 | 37 |
| 44 | Initial-state dependence of the route to chaos of an external-cavity laser. Physical Review A, 2017, 95, . | 2.5 | 15 |
| 45 | Global mapping of stratigraphy of an old-master painting using sparsity-based terahertz reflectometry. Scientific Reports, 2017, 7, 15098. | 3.3 | 51 |
| 46 | Delay induced high order locking effects in semiconductor lasers. Chaos, 2017, 27, 114325. | 2.5 | 16 |
| 47 | Reading bits on a CDâ€ROM without a photodiode. IET Optoelectronics, 2017, 11, 213-216. | 3.3 | 0 |
| 48 | Terahertz deconvolution based on autoregressive spectral extrapolation., 2017,,. | | 0 |
| 49 | Depth resolution enhancement of terahertz deconvolution by autoregressive spectral extrapolation. Optics Letters, 2017, 42, 1828. | 3.3 | 33 |
| 50 | Terahertz imaging for subsurface investigation of art paintings. , 2017, , . | | 0 |
| 51 | Terahertz frequency-wavelet domain deconvolution for stratigraphic and subsurface investigation of art painting. Optics Express, 2016, 24, 26972. | 3.4 | 62 |
| 52 | A multi-GHz chaotic optoelectronic oscillator based on laser terminal voltage. Applied Physics Letters, 2016, 108, 191109. | 3. 3 | 21 |
| 53 | Compressive Sensing with Optical Chaos. Scientific Reports, 2016, 6, 35206. | 3. 3 | 45 |
| 54 | Comparative study of mid-20 th C. Art using THz and X-ray imaging., 2016,,. | | 0 |

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|----|--|------|-----------|
| 55 | Polarization-resolved terahertz imaging of intra- and inter-laminar damages in hybrid fiber-reinforced composite laminate subject to low-velocity impact. Composites Part B: Engineering, 2016, 92, 167-174. | 12.0 | 53 |
| 56 | Sparse signal reconstruction based on experimental chaos generated by a laser diode. Proceedings of SPIE, 2016 , , . | 0.8 | 0 |
| 57 | Reading a CD-ROM without a photodiode. , 2016, , . | | 1 |
| 58 | Low-frequency fluctuations in an external-cavity laser leading to extreme events. Physical Review E, 2016, 93, 042216. | 2.1 | 15 |
| 59 | Enhanced Terahertz Imaging of Small Forced Delamination in Woven Glass Fibre-reinforced Composites with Wavelet De-noising. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 289-301. | 2.2 | 50 |
| 60 | Simultaneous Bifurcation Diagrams of Carrier Number and Optical Intensity of External Cavity Laser. , 2016, , . | | 0 |
| 61 | Polarization-resolved terahertz imaging of hybrid fiber-reinforced composite laminate subject to low-velocity impact., 2016,,. | | 0 |
| 62 | Experimental route to chaos of an external-cavity semiconductor laser. Physical Review A, 2015, 91, . | 2.5 | 16 |
| 63 | Impact damage characterization in hybrid fiber-reinforced composites using terahertz imaging in time and frequency domain. , 2015, , . | | 0 |
| 64 | Multiscale Ordinal Symbolic Analysis of the Lang-Kobayashi Model for External-Cavity Semiconductor Lasers: A Test of Theory. IEEE Journal of Quantum Electronics, 2015, 51, 1-6. | 1.9 | 11 |
| 65 | Nondestructive evaluation of forced delamination in glass fiber-reinforced composites by terahertz and ultrasonic waves. Composites Part B: Engineering, 2015, 79, 667-675. | 12.0 | 129 |
| 66 | Statistical Properties of an External-Cavity Semiconductor Laser: Experiment and Theory. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 553-560. | 2.9 | 5 |
| 67 | Time-delay concealment and complexity enhancement of an external-cavity laser through optical injection. Optics Letters, 2015, 40, 4416. | 3.3 | 78 |
| 68 | Experimental bifurcation-cascade diagram of an external-cavity semiconductor laser. Optics Express, 2014, 22, 2348. | 3.4 | 24 |
| 69 | Ultrafast Random Bit Generation Based on the Chaotic Dynamics of a Semiconductor Laser. , 2014, , . | | 1 |
| 70 | Statistics of the optical intensity of a chaotic external-cavity DFB laser. Optics Letters, 2014, 39, 5949. | 3.3 | 18 |
| 71 | Bifurcation-Cascade Diagrams of an External-Cavity Semiconductor Laser: Experiment and Theory. IEEE Journal of Quantum Electronics, 2014, 50, 965-972. | 1.9 | 10 |
| 72 | Bifurcation diagram of an external-cavity semiconductor laser: experiment and theory. Proceedings of SPIE, 2014, , . | 0.8 | 1 |

| # | Article | IF | Citations |
|----|--|-----|-----------|
| 73 | Fast random bit generation with a single chaotic laser subjected to optical feedback. , 2014, , . | | O |
| 74 | Mapping the nonlinear dynamics of a laser diode via its terminal voltage. Optics Letters, 2014, 39, 5630. | 3.3 | 11 |
| 75 | Two approaches for ultrafast random bit generation based on the chaotic dynamics of a semiconductor laser. Optics Express, 2014, 22, 6634. | 3.4 | 115 |
| 76 | Experimental Bifurcation Diagram and Terminal Voltage Change of an External-cavity Semiconductor Laser. , $2014, \ldots$ | | 0 |
| 77 | Generation of orthogonal codes with chaotic optical systems. Optics Letters, 2011, 36, 2287. | 3.3 | 9 |
| 78 | Breaking on/off phase-shift keying in optical chaos-based cryptosystems. , 2010, , . | | 2 |
| 79 | Multiple-Access Optical Chaos-Based Communications Using Optoelectronic Systems. , 2010, , . | | 1 |
| 80 | Chaos multiplexing with external-cavity semiconductor lasers. , 2010, , . | | 0 |
| 81 | Spectrally efficient multiplexing of chaotic light. Optics Letters, 2010, 35, 2016. | 3.3 | 15 |
| 82 | Chaos-Based Secure Optical Communications Using Semiconductor Lasers. , 2010, , 451-478. | | 2 |
| 83 | Multiplexing digital information using hyperchaotic optoelectronic oscillators with nonlinear time-delayed feedback loops., 2009,,. | | O |
| 84 | Multiplexed encryption using chaotic systems with multiple stochastic-delayed feedbacks. Physical Review E, 2009, 80, 066209. | 2.1 | 26 |
| 85 | Time-Delay Identification in a Chaotic Semiconductor Laser With Optical Feedback: A Dynamical Point of View. IEEE Journal of Quantum Electronics, 2009, 45, 879-1891. | 1.9 | 191 |
| 86 | Masking the time-delay of the chaotic output of an external-cavity laser. , 2008, , . | | 0 |
| 87 | Synchronization regimes of unidirectionally coupled VCSELs with orthogonal optical injection. , 2007, , . | | O |
| 88 | Polarization synchronization in unidirectionally coupled vertical-cavity surface-emitting lasers with orthogonal optical injection. Physical Review E, 2007, 75, 056213. | 2.1 | 52 |
| 89 | A simple, extremely large bandwidth, modulator-free QKD system. , 2007, , . | | 0 |
| 90 | Influence of polarization mode competition on the synchronization of two unidirectionally coupled vertical-cavity surface-emitting lasers. Optics Letters, 2007, 32, 1629. | 3.3 | 67 |

| # | Article | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Loss of time-delay signature in the chaotic output of a semiconductor laser with optical feedback. Optics Letters, 2007, 32, 2960. | 3.3 | 190 |
| 92 | Influence of digitisation on master–slave synchronisation in chaos-encrypted data transmission. IET Optoelectronics, 2007, 1, 3-8. | 3.3 | 2 |
| 93 | Polarization Synchronization Properties of Unidirectionally Coupled VCSELs., 2007,,. | | 0 |
| 94 | Delay-time identification in chaotic optical systems with two delays. , 2006, , . | | 7 |
| 95 | Time delay identification in chaotic cryptosystems ruled by delay-differential equations. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2005, 72, 373. | 0.4 | 71 |
| 96 | Synchronization regimes of optical-feedback-induced chaos in unidirectionally coupled semiconductor lasers. Physical Review E, 2002, 65, 056205. | 2.1 | 85 |
| 97 | Comparison of two types of synchronization of unidirectionally coupled external-cavity semiconductor lasers., 2002,,. | | 0 |
| 98 | Comparison of two types of synchronization of external-cavity semiconductor lasers. Optics Letters, 2002, 27, 31. | 3.3 | 41 |
| 99 | Secure communication scheme using chaotic laser diodes subject to incoherent optical feedback and incoherent optical injection. Optics Letters, 2001, 26, 1486. | 3.3 | 92 |
| 100 | Cryptographic scheme using chaotic laser diodes subject to incoherent optical feedback., 2001,,. | | 2 |
| 101 | Two types of synchronization in unidirectionally coupled chaotic external-cavity semiconductor lasers. Physical Review E, 2001, 64, 045203. | 2.1 | 59 |
| 102 | Renal insufficiency in infant: side-effect of prenatal exposure to mesalazine?. Lancet, The, 1994, 344, 620-621. | 13.7 | 81 |
| 103 | Synchronization of chaotic semiconductor lasers with phase-conjugate feedback., 0, , . | | 0 |
| 104 | Dynamical behavior of a multimode semiconductor laser subject to a single mode selective optical feedback. , 0, , . | | 0 |
| 105 | Statistical study of the time between total power dropouts in a VCSEL operating in the low-frequency fluctuations regime. , 0, , . | | 0 |