Leonardo C Pacheco-Londono

List of Publications by Year
in descending order

82 papers	970 citations	516561 16 h-index	526166 27 g-index
83 all docs	83 docs citations	83 times ranked	935 citing authors

#	ARTICLE	IF	CITATIONS
1	Vibrational spectroscopy standoff detection of explosives. Analytical and Bioanalytical Chemistry, 2009, 395, 323-335.	1.9	114
2	Structural properties and photoreactivity relationships of substituted phenols in TiO2 suspensions. Applied Catalysis B: Environmental, 2003, 43, 293-301.	10.8	62
3	Monitoring the Î±â†'Î² solidâ€"solid phase transition of RDX with Raman spectroscopy: A theoretical and experimental study. Journal of Molecular Structure, 2010, 970, 51-58.	1.8	57
4	Structureâ^'Activity Relationships for The Anti-HIV Activity of Flavonoids. Journal of Chemical Information and Computer Sciences, 2002, 42, 1241-1246.	2.8	54
5	Nanotechnology-Based Detection of Explosives and Biological Agents Simulants. IEEE Sensors Journal, 2008, 8, 963-973.	2.4	45
6	Detection of High Explosives Using Reflection Absorption Infrared Spectroscopy with Fiber Coupled Grazing Angle Probe/FTIR. Sensing and Imaging, 2009, 10, 1-13.	1.0	36
7	Vibrational spectra and structure of RDX and its 13C- and 15N-labeled derivatives: A theoretical and experimental study. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 76, 137-141.	2.0	33
8	Long and local range structural changes in M[(bdc)(ted)0.5] (MÂ=ÂZn, Ni or Cu) metal organic frameworks upon spontaneous thermal dispersion of LiCl and adsorption of carbon dioxide. Microporous and Mesoporous Materials, 2015, 212, 8-17.	2.2	28
9	Remote Detection of Hazardous Liquids Concealed in Glass and Plastic Containers. IEEE Sensors Journal, 2010, 10, 693-698.	2.4	25
10	Standoff Detection of Highly Energetic Materials Using Laser-Induced Thermal Excitation of Infrared Emission. Applied Spectroscopy, 2015, 69, 535-544.	1.2	24
11	FT-IR Standoff Detection of Thermally Excited Emissions of Trinitrotoluene (TNT) Deposited on Aluminum Substrates. Applied Spectroscopy, 2013, 67, 181-186.	1.2	21
12	Characterization of Î±- and Î²-RDX Polymorphs in Crystalline Deposits on Stainless Steel Substrates. Crystal Growth and Design, 2016, 16, 3631-3638.	1.4	21
13	Molecular Parameters Responsible for the Melting Point of 1,2,3-Diazaborine Compounds. Journal of Chemical Information and Computer Sciences, 2003, 43, 1513-1519.	2.8	20
14	Discriminant analysis for activation of the aryl hydrocarbon receptor by polychlorinated naphthalenes. Computational and Theoretical Chemistry, 2004, 678, 157-161.	1.5	18
15	Remote Continuous Wave and Pulsed Laser Raman Detection of Chemical Warfare Agents Simulants and Toxic Industrial Compounds. Sensing and Imaging, 2010, 11, 131-145.	1.0	17
16	Detection of Nitroaromatic and Peroxide Explosives in Air Using Infrared Spectroscopy: QCL and FTIR. Advances in Optical Technologies, 2013, 2013, 1-8.	0.8	17
17	Active Mode Remote Infrared Spectroscopy Detection of TNT and PETN on Aluminum Substrates. Journal of Spectroscopy, 2017, 2017, 1-11.	0.6	17
18	Use of fiber optic coupled FT-IR in detection of explosives on surfaces. , 2004, 5403, 237.		16

#	Article	IF	Citations
19	Preparation of TNT, RDX and Ammonium Nitrate Standards on Gold-on-Silicon Surfaces by Thermal Inkjet Technology. Sensing and Imaging, 2010, 11, 147-169.	1.0	16
20	Zero valent silver-based electrode for detection of 2,4,-dinitrotoluene in aqueous media. Electrochimica Acta, 2013, 88, 832-838.	2.6	16
21	Artificial Intelligence Assisted Mid-Infrared Laser Spectroscopy In Situ Detection of Petroleum in Soils. Applied Sciences (Switzerland), 2020, 10, 1319.	1.3	16
22	Applications of Quantum Cascade Laser Spectroscopy in the Analysis of Pharmaceutical Formulations. Applied Spectroscopy, 2016, 70, 1511-1519.	1.2	15
23	Characterization and differentiation of high energy cyclic organic peroxides by GC/FT-IR, GC-MS, FT-IR, and Raman microscopy. , 2005, , .		14
24	An experimental and theoretical study of the synthesis and vibrational spectroscopy of triacetone triperoxide (TATP). , 2004, 5403, 279.		13
25	Fiber Optic Coupled Raman Based Detection of Hazardous Liquids Concealed in Commercial Products. International Journal of Spectroscopy, 2012, 2012, 1-7.	1.4	13
26	High Explosives Mixtures Detection Using Fiber Optics Coupled: Grazing Angle Probe/Fourier Transform Reflection Absorption Infrared Spectroscopy. Sensing and Imaging, 2008, 9, 27-40.	1.0	12
27	Vibrational spectroscopy standoff detection of threat chemicals. Proceedings of SPIE, 2011, , .	0.8	11
28	Characterization of thermal inkjet technology TNT deposits by fiber optic-grazing angle probe FTIR spectroscopy. , 2005, , .		10
29	Novel Uncatalyzed Synthesis and Characterization of Diacetone Diperoxide. Propellants, Explosives, Pyrotechnics, 2012, 37, 413-421.	1.0	10
30	Chemometrics-enhanced fiber optic Raman detection, discrimination and quantification of chemical agents simulants concealed in commercial bottles. Analytical Chemistry Research, 2014, 2, 15-22.	2.0	10
31	Chemometricsâ€enhanced laserâ€induced thermal emission detection of PETN and other explosives on various substrates. Journal of Chemometrics, 2015, 29, 329-337.	0.7	10
32	EXPRESS: Classical Least Squares-Assisted MIR Laser Spectroscopy Detection of High Explosives on Fabrics. Applied Spectroscopy, 2019, 73, 000370281878041.	1.2	10
33	VIBRATIONAL SPECTROSCOPY OF CHEMICAL AGENTS SIMULANTS, DEGRADATION PRODUCTS OF CHEMICAL AGENTS AND TOXIC INDUSTRIAL COMPOUNDS. International Journal of High Speed Electronics and Systems, 2007, 17, 827-843.	0.3	8
34	Mid-Infrared Laser Spectroscopy Detection and Quantification of Explosives in Soils Using Multivariate Analysis and Artificial Intelligence. Applied Sciences (Switzerland), 2020, 10, 4178.	1.3	8
35	Anomaly Identification during Polymerase Chain Reaction for Detecting SARS-CoV-2 Using Artificial Intelligence Trained from Simulated Data. Molecules, 2021, 26, 20.	1.7	8
36	Review of the various analytical techniques and algorithms for detection and quantification of TATP. , 2005, 5778, 317.		7

#	Article	IF	Citations
37	Characterization of peroxide-based explosives by thermal analysis. , 2006, , .		7
38	Open path FTIR detection of threat chemicals in air and on surfaces. Proceedings of SPIE, 2011, , .	0.8	7
39	Docking and Molecular Dynamic of Microalgae Compounds as Potential Inhibitors of Beta-Lactamase. International Journal of Molecular Sciences, 2022, 23, 1630.	1.8	7
40	Raman microspectroscopy crystallization studies of 2,4,6-TNT in different solvents. , 2004, , .		6
41	Temperature dependence of detection limits of TNT on metallic surfaces using fiber optic coupled FTIR. , 2006, 6201, 719.		6
42	UV Raman detection of 2,4-DNT in contact with sand particles. , 2006, 6217, 984.		6
43	SERS and Density Functional Theory Study of o-Dinitrobenzene on Cu Nanoparticles. IEEE Sensors Journal, 2010, 10, 699-706.	2.4	6
44	A rapid technique for synthesis of metallic nanoparticles for surface enhanced Raman spectroscopy. Journal of Raman Spectroscopy, 2013, 44, 723-726.	1.2	6
45	Characterization of layers of Tetryl, TNB and HMX on metal surfaces using fiber optics coupled grazing angle-FTIR. , 2007, 6542, 1142.		5
46	Detection of 2,4,6-trinitrotoluene on non-traditional surfaces using fiber optic coupled grazing angle probe: FTIR. , 2007, , .		5
47	Angular dependence of source-target-detector in active mode standoff infrared detection. , 2013, , .		5
48	Standoff infrared detection of explosives at laboratory scale. , 2006, , .		4
49	Novel method for the preparation of explosives nanoparticles. , 2006, , .		4
50	Detection of simulants and degradation products of chemical warfare agents by vibrational spectroscopy. , 2007, , .		4
51	Mechanism for the Uncatalyzed Cyclic Acetone-Peroxide Formation Reaction: An Experimental and Computational Study. Journal of Physical Chemistry A, 2013, 117, 10753-10763.	1.1	4
52	Standoff laser-induced thermal emission of explosives. Proceedings of SPIE, 2013, , .	0.8	4
53	Sublimation enthalpy of homemade peroxide explosives using a theoretically supported non-linear equation. Journal of Thermal Analysis and Calorimetry, 2015, 119, 681-688.	2.0	4
54	Optical Properties of Î²-RDX Thin Films Deposited on Gold and Stainless Steel Substrates Calculated from Reflectionâ€“Absorption Infrared Spectra. Applied Spectroscopy, 2017, 71, 1990-2000.	1.2	4

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55	Mid-Infrared Laser Spectroscopy Applications I: Detection of Traces of High Explosives on Reflective and Matte Substrates. , 2019, , .		4
56	Surface Persistence of Trace Level Deposits of Highly Energetic Materials. Molecules, 2019, 24, 3494.	1.7	4
57	Spectroscopic characterization of nitroaromatic landmine signature explosives. , 2004, , .		3
58	TNT removal from culture media by three commonly available wild plants growing in the Caribbean. Journal of Environmental Monitoring, 2012, 14, 30-33.	2.1	3
59	Dependence of detection limits on angular alignment, substrate type and surface concentration in active mode standoff IR. , 2013, , .		3
60	Quantum cascade laser backâ€reflection spectroscopy at grazingâ€angle incidence using the fast Fourier transform as a data preprocessing algorithm. Journal of Chemometrics, 2019, 33, e3167.	0.7	3
61	Enhanced RDX Detection Studies on Various Types of Substrates via Tunable Quantum Cascade Laser Spectrometer Coupled with Grazing Angle Probe. IOP Conference Series: Materials Science and Engineering, 2019, 519, 012007.	0.3	3
62	API Content and Blend Uniformity Using Quantum Cascade Laser Spectroscopy Coupled with Multivariate Analysis. Pharmaceutics, 2021, 13, 985.	2.0	3
63	Self-assembly and supramolecular isomerism in 1D metalâ€“organometallic networks based on transition-metal assemblies from 1,1â€²-ferrocene-dicarboxylic acid and ancillary nitrogen heterocycle ligands. CrystEngComm, 2021, 23, 8198-8208.	1.3	3
64	Molecular parameters and reactivity responsible for properties of nitro explosives. , 2004, 5403, 269.		2
65	Determination of TATP, DNT, and TNT in air by FTIR and PLS-discriminant analysis. , 2005, , .		2
66	Growth of Ag, Au, Cu, and Pt nanostructures on surfaces by micropatterned laser-image formations. Applied Optics, 2011, 50, 4161.	2.1	2
67	Experimental and theoretical model of reactivity and vibrational detection modes of triacetone triperoxide (TATP) and homologues. , 2004, , .		1
68	Surface enhanced Raman scattering of nitroexplosives on nontraditional substrates. , 2005, , .		1
69	Detection of explosive mixtures on surfaces using grazing angle probe - FTIR: model for classification. , 2006, , .		1
70	Enhanced Raman Detection using Spray-On Nanoparticles/Remote Sensed Raman Spectroscopy. ACS Symposium Series, 2009, , 131-140.	0.5	1
71	Improved detection of highly energetic materials traces on surfaces by standoff laser-induced thermal emission incorporating neural networks. Proceedings of SPIE, 2013, , .	0.8	1
72	Mid-Infrared Laser Spectroscopy Applications in Process Analytical Technology: Cleaning Validation, Microorganisms, and Active Pharmaceutical Ingredients in Formulations. , 2019, , .		1

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73	Modulated-laser source induction system for remote detection of infrared emissions of high explosives using laser-induced thermal emission. Optical Engineering, 2020, 59, 1.	0.5	1
74	Trace Detection of C-4 on Aluminum Using Mid-Infrared Reflectionâ€“Absorption Quantum Cascade Laser Spectroscopy. Smart Innovation, Systems and Technologies, 2022, , 227-239.	0.5	1
75	Molecular Parameters Responsible for the Melting Point of 1,2,3-Diazaborine Compounds.. ChemInform, 2003, 34, no.	0.1	0
76	Modeling of nitro group in explosives: spectroscopic measurements and theoretical calculations. , 2007, , .		0
77	Detection of hazardous liquids concealed in glass, plastic, and aluminum containers. , 2007, , .		0
78	Structureâ€”Activity Relationships for the antiâ€HIV Activity of Flavonoids.. ChemInform, 2002, 33, 221-221.	0.1	0
79	Nanosensors: From near field to far field applications. Proceedings of SPIE, 2011, , .	0.8	0
80	VIBRATIONAL SPECTROSCOPY OF CHEMICAL AGENTS SIMULANTS, DEGRADATION PRODUCTS OF CHEMICAL AGENTS AND TOXIC INDUSTRIAL COMPOUNDS. Selected Topics in Electornics and Systems, 2008, , 199-215.	0.2	0
81	Fabrication of Columnar Sub-microstructures using a Q-switched Nd:YAG Laser in the Nanosecond Time Regime. Journal of Laser Micro Nanoengineering, 2015, 10, 263-268.	0.4	0
82	Detection of Primary and Secondary Explosives Using Infrared Spectroscopy and Chemometrics. , 0, , .		0