



Vincenzo Pierro

Univ. of Sannio @Benevento and INFN branch @Univ of Salerno

Email verificata su unisannio.it - [Home page](#)

[Astronomy](#) [Applied Physics](#) [Electromagnetics](#) [Optics](#).

My best scientific papers

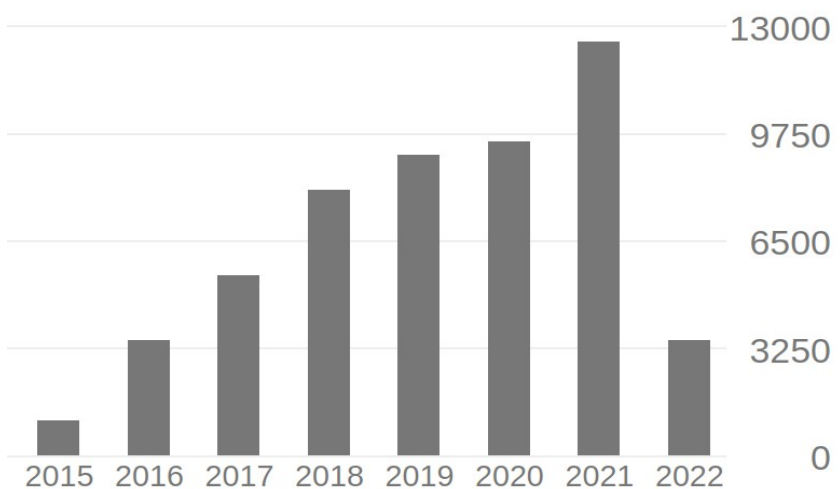
TITOLO	CITATA DA	ANNO
Observation of Gravitational Waves from a Binary Black Hole Merger VPLSC VIRGO Physical Review Letters 116 (6), 061102	15700 *	2016
Advanced ligo J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, K Ackley, C Adams, ... Classical and quantum gravity 32 (7), 074001	3755 *	2015
Multi-messenger observations of a binary neutron star merger BP Abbott, S Bloemen, P Canizares, H Falcke, RP Fender, S Ghosh, ...	2528	2017
Gravitational waves and gamma-rays from a binary neutron star merger: GW170817 and GRB 170817A BP Abbott, R Abbott, TD Abbott, F Acernese, K Ackley, C Adams, T Adams, ... The Astrophysical Journal Letters 848 (2), L13	2085	2017
GW170814: a three-detector observation of gravitational waves from a binary black hole coalescence BP Abbott, R Abbott, TD Abbott, F Acernese, K Ackley, C Adams, T Adams, ... Physical review letters 119 (14), 141101	1946	2017
LIGO: the laser interferometer gravitational-wave observatory BP Abbott, R Abbott, R Adhikari, P Ajith, B Allen, G Allen, RS Amin, ... Reports on Progress in Physics 72 (7), 076901	1606	2009
Binary black hole mergers in the first advanced LIGO observing run BP Abbott, R Abbott, TD Abbott, MR Abernathy, F Acernese, K Ackley, ... Physical Review X 6 (4), 041015	1453	2016
Tests of general relativity with GW150914 L Scientific, V Collaborations, BP Abbott, R Abbott, TD Abbott, ... Physical review letters 116 (22), 221101	1259	2016
GW170817: Measurements of neutron star radii and equation of state BP Abbott, R Abbott, TD Abbott, F Acernese, K Ackley, C Adams, T Adams, ... Physical review letters 121 (16), 161101	1198	2018
GW170608: observation of a 19 solar-mass binary black hole coalescence BP Abbott, R Abbott, TD Abbott, F Acernese, K Ackley, C Adams, T Adams, ... The Astrophysical Journal Letters 851 (2), L35	1055	2017
A gravitational-wave standard siren measurement of the Hubble constant BP Abbott, R Abbott, TD Abbott, F Acernese, K Ackley, C Adams, T Adams, ... arXiv preprint arXiv:1710.05835	961	2017
Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light J Aasi, J Abadie, BP Abbott, R Abbott, TD Abbott, MR Abernathy, C Adams, ... Nature Photonics 7 (8), 613-619	906	2013

My ranking

Citata da

[VISUALIZZA TUTTO](#)

	Tutte	Dal 2017
Citazioni	58170	48331
Indice H	89	71
i10-index	195	168



My recent scientific papers

TITOLO	CITATA DA	ANNO
Bimodal Approach for Noise Figures of Merit Evaluation in Quantum-Limited Josephson Traveling Wave Parametric Amplifiers L Fasolo, C Barone, M Borghesi, G Carapella, AP Caricato, I Carusotto, ... IEEE Transactions on Applied Superconductivity	1	2022
Development of quantum limited superconducting amplifiers for advanced detection S Pagano, C Barone, M Borghesi, W Chung, G Carapella, AP Caricato, ... IEEE Transactions on Applied Superconductivity	1	2022
Detector Array Readout with Traveling Wave Amplifiers A Giachero, C Barone, M Borghesi, G Carapella, AP Caricato, I Carusotto, ... arXiv preprint arXiv:2111.01512	2	2021
Optimal Design of Coatings for Mirrors of Gravitational Wave Detectors: Analytic Turbo Solution via Herpin Equivalent Layers V Pierro, V Fiumara, F Chiadini Applied Sciences 11 (24), 11669		2021
Ternary quarter wavelength coatings for gravitational wave detector mirrors: Design optimization via exhaustive search V Pierro, V Fiumara, F Chiadini, V Granata, O Durante, J Neilson, ... Physical Review Research 3 (2), 023172	2	2021
Fully Optimized Ternary Coatings for Next Generation Interferometric Cryogenic Detectors of Gravitational Waves IM Pinto, V Pierro Physical Interpretations of Relativity Theory: International Scientific ...		2021
Analysis of Josephson junctions switching time distributions for the detection of single microwave photons ASP Komnang, C Guarcello, C Barone, C Gatti, S Pagano, V Pierro, ... Chaos, Solitons & Fractals 142, 110496	7	2021

List of 45 internal Presentation given as LIGO/VIRGO member

[Vincenzo Pierro](#) of University of Sannio at Benevento is listed as an author on the following documents:

<u>LIGO-Number</u>	<u>Title</u>	<u>Last Updated</u>
P2100180-v4	Improving the precision of e-beam evaporation for nanolayered coatings	23 Nov 2021
G2101842-v1	Ternary Coating Optimization Update: More on The Silicon Nitride Option	06 Sep 2021
G2101479-v1	Optimized Ternary Coatings : Design and Performance	08 Jul 2021
G2101040-v1	Performance of Optimized Ternary Coatings at Ambient and Cryo Temperatures	18 May 2021
G2100429-v1	Ternary Coatings Optimization	19 Mar 2021
G2100409-v1	Estimating Chirp Mass and Keplerian Eccentricity from Time-Frequency Tracks	16 Mar 2021
P2000519-v3	Ternary Quarter Wavelength Coatings for Gravitational Wave Detector Mirrors: Design Optimization via Exhaustive Search	10 Feb 2021
G2100124-v1	On the Structure of Optimal QWL Ternary Coatings	27 Jan 2021
G2100118-v2	Chirp Mass and Keplerian Eccentricity Estimation from Time-Frequency Tracks	26 Jan 2021
L2000286-x0	MoU between USannio-UniSA, CSULA and UoU	18 Nov 2020
P2000457-v1	On the performance limits of coatings for gravitational wave detectors made of alternating layers of two materials	30 Oct 2020
G1801732-v1	USannio Coating Lab Update (+ Mixed Thoughts)	05 Sep 2018
G1801345-v1	Direction of Arrival Estimation for Transient GW Sources via Time-Frequency Representations	04 Jul 2018
G1701541-v1	Robust Chirp Mass Estimation from Sparsified TF Tracks	29 Aug 2017
G1701529-v1	Toward an Integrated/Distributed Optical Coating Research Infrastructure in Italy	20 Aug 2017
G1601337-v1	nm-Layered Glassy Oxide Composites for 3rd Generation Interferometric Gravitational Wave Detectors	14 Jun 2016
G1600665-v1	nm-Layered Composite Coating Materials: Status and TBD	15 Mar 2016
P1600078-v1	nm-Layered Glassy Oxide Composites for 3rd Generation Interferometric Gravitational Wave Detectors	01 Mar 2016
G1501389-v5	More on Time Frequency Data Analysis of the "Rosh Hashanah" (GW150914) Event	17 Feb 2016
G1101096-v1	Material Loss Angles from Direct Measurements of Broadband Thermal Noise: Statistical Analysis and Preliminary Comparison with Results from Mixture Theory	12 Dec 2014
P1400128-v3	Material Loss Angles from Direct Measurements of Broadband Thermal Noise	02 Sep 2014
G1301096-v1	Glitch Entomology Hints, TF Tools and Roadmap	26 Sep 2013
G1301061-v1	Nanometer Composites for Low Noise Optical Coatings Status and Perspectives	24 Sep 2013
T1300598-v1	An Atlas of Compressed Coding Retrieved LIGO S5 Glitch Skeletons,	30 Jun 2013
G1200976-v1	Interdiffused Coatings	11 Sep 2012
P1100042-v3	Robust Gravitational Wave Burst Detection and Source Localization in a Network of Interferometers Using Cross Wigner Spectra	29 Oct 2011
P0900091-v5	Measurement of Thermal Noise in Multilayer Coatings with Optimized Layer Thickness	06 Apr 2010
G0901151-v1	A Neural Net for Glitch-Burst Discrimination and Glitch Classification	15 Mar 2010
G0901152-v1	One More Technique for Burst Source Position Identification: X-Wigner Spectra	15 Mar 2010
P070066-x0	Perspectives on beam-shaping optimization for thermal-noise reduction in advanced gravitational-wave interferometric detectors: Bounds, profiles, and critical parameters	14 Oct 2009
T080337-x0	Minimum Brownian Noise Dichroic Dielectric Mirror Coatings for AdLIGO	15 Jan 2009
G080487-x0	Status of Coating Work at Sannio - LSC/Virgo Collaboration Meeting, September 22-25, 2008, Amsterdam	01 Oct 2008
G080083-x0	Perspectives on beam-shaping optimization for thermal-noise reduction in advanced LIGO: Bounds, profiles, and critical parameters	20 May 2008
G080082-x0	Optimization of Coating Design for Reduced Thermal Noise	20 May 2008
G070727-x0	Coating Research at Sannio - Status - LSC/Virgo Collaborations Meeting, October 22-25 2007, Hannover Germany	29 Oct 2007
P070005-x0	Progress and Challenges Developing a Coating for Next Generation Gravitational-Wave Detectors	16 Aug 2007
G070309-x0	Coating Design Optimization for Advanced Interferometers: Minimizing the Total Noise Budget - LIGO/VIRGO Scientific Collaborations Meeting, May 21-25, 2007, Cascina, Pisa, Italy	25 May 2007
G070308-x0	Beam Profile Optimization for Thermal Noise Reduction in Advanced IFOs: Lower Bounds, Margins of Progress and Degrees of Freedom	25 May 2007
T060173-x0	Measuring coating mechanical quality factors in a layered cantilever geometry: a fully analytic model	14 Aug 2006
P060027-x0	Optimized multilayer dielectric mirror coatings for gravitational wave interferometers	19 Jul 2006
G060088-x0	Optimized Coating Status - LSC Meeting, March 19-22, 2006, Hanford WA	14 Apr 2006
G060087-x0	On the Analytic Struture of a Family of Hyperboloidal Beams of Potential Interest for Adv-LIGO - LSC Meeting, March 19-22, 2006, Hanford WA	14 Apr 2006
P060003-x0	On the Analytic Structure of a Family of Hyperboloidal Beams of Potential Interest for Future LIGO Interferometers	22 Feb 2006
G050363-x0	Optimized Coatings - LSC Meeting, August 14th - 17th, Hanford WA	16 Aug 2005
G050176-x0	Non periodic dielectric mirror coatings - LSC Meeting, March 20-23, 2005, Livingston LA	28 Mar 2005