

PERSONAL INFORMATION

Francesco Biccari



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+ [REDACTED]

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Date of birth [REDACTED] | Nationality Italian

ACADEMIC CAREER

Oct 2021 – present

Associate professor at the University of Florence (Italy)

Experimental physics of semiconductors, quantum nanophotonics (SSD FIS/03, SC 02/B1).

Sept 2013 – Sept 2021

Assistant professor at the University of Florence (Italy)

Experimental physics of semiconductors, quantum nanophotonics (SSD FIS/03, SC 02/B1). (RTDa: Sept 2013 – Aug 2018. RTDb/tenure track: Oct 2018 – Sept 2021)

Mar 2010 – Feb 2013

Postdoctoral researcher at ENEA Casaccia Research Center (Italy)

Supervisor: dr. Alberto Mittiga. Activity: Fabrication and optical and electrical characterization of $\text{Cu}_2\text{ZnSnS}_4$ thin films and $\text{Cu}_2\text{ZnSnS}_4$ based photovoltaic cells. (Assegno di Ricerca. Contracts: 22/3/2010–21/3/2011, 4/4/2011–3/4/2012, 2/5/2012–28/2/2013)

Nov 2006 – Oct 2009

Ph.D. in Physics at Sapienza University of Rome (Italy)

Advisor: prof. Mario Capizzi. Activity: Fabrication and optical and electrical characterization of Cu_2O material and Cu_2O based photovoltaic cells. The experimental work was carried out at the ENEA Casaccia Research Center (Rome, Italy) under the supervision of dr. Alberto Mittiga. Thesis defended on 16 February 2010. ([Download](#))

Oct 1999 – Sept 2005

Master's degree in Physics at Sapienza University of Rome (Italy)

Specialization: Nuclear and subnuclear physics. Final grade: 110 *cum laude* (out of 110). Thesis defended on 29 September 2005. ([Download](#))
4 months of the thesis period were spent at Fermilab Laboratory in Chicago (USA).

Aug 2004 – Sept 2004

Summer student at Fermilab (Chicago, USA)

Selected for a formation experience in particle physics, paid by the Dept. of Energy of the USA.

CURRENT RESEARCH TOPICS

Growth and optical characterization (mainly photoluminescence) of semiconductor based single photon emitters for quantum information technologies and their integration in optical resonators; optical characterization of new semiconductors for photovoltaics and optoelectronics (perovskites).

OTHER JOBS

Sept 2014

Consultant for the Italian division of the Pearson publishing house. Content analysis for the Italian adaptation of the book Sear's & Zemansky's University Physics.

June 2012

Consultant for the Sapienza University Press (Italy). Programming of 3 \LaTeX classes for books, articles and conference proceedings.

Oct 2005 – Sept 2006

Software engineer (SAS and SQL ORACLE) at Citel group (Italy), involved in the Billing Assurance area of Telecom Italia company for the company's database management.

SCIENTIFIC HIGHLIGHTS

- Citation analysis (Scopus)** 44 articles, 1 book chapter, and 8 conference proceedings; See Attachments.
Citations: 1031; h-index: 14.
- Funded projects**
- 2022–2025:** Member of “NQSTI” (3 years, my funds 70 k€), funded by MUR (PNRR, miss. 4, comp. 2, inv. 1.3, Partenariati estesi alle università, ai centri di ricerca, alle aziende per il finanziamento di progetti di ricerca di base). Topic: National Quantum Science and Technology Institute.
 - 2022–2025:** Member of “I-PHOQS” (3 years, my funds 214 k€), funded by MUR (PNRR, miss. 4, comp. 2, inv. 3.1, Fondo per la realizzazione di un sistema integrato di infrastrutture di ricerca e innovazione). Topic: Integrated Infrastructure Initiative in Photonic and Quantum Sciences.
 - 2022–2023:** Principal investigator of “Photonic Future” (2021.1508, 2 years, 100 k€), funded by Fondazione Cassa di Risparmio di Firenze. Topic: Solid state single photon emitters for photonics.
 - 2022–2023:** Principal investigator of “PUPO” (2 years, 61 k€), funded by University of Florence. Topic: Quantum dots for tracking of polymeric materials.
 - 2020–2021:** Principal investigator of “SFERIQA” (2020.1511, 1 year, 50 k€), funded by Fondazione Cassa di Risparmio di Firenze. Topic: Dielectric microspheres for quantum applications.
 - 2019–2022:** Member of the European Project “NARCISO” (H2020 FET OPEN, type of action RIA, Grant Agreement no. 828890, 2,6 M€), funded by European Union. Topic: solid state dewetting of Si and Ge thin films for the formation of complex patterned nanostructures for applications in photonic and microfluidic devices.
 - 2019–2020:** Principal investigator of “EPICO” (2018.0950, 1 year, 16 k€), funded by Fondazione Cassa di Risparmio di Firenze. Topic: Inorganic perovskites for optoelectronic applications.
 - 2017–2018:** Principal investigator of “PERBACCO” (2016.1084, 1 year, 30 k€), funded by Fondazione Cassa di Risparmio di Firenze. Topic: Inorganic perovskites for optoelectronic applications.
 - 2017:** Winner of the Italian MIUR Funding programme for basic research activities (3 k€).
 - 2013–2017:** Local coordinator of the FIRB project “DeLIGHTeD” (RBFR12RS1W, 3 years, 1,0 M€), funded by Italian Ministry of Education and Research. Topic: GaAsN site-controlled quantum dots and their integration with photonic crystal structures.
- Awards**
- 2021:** Front cover of the Advanced Quantum Technology journal (see article no. 40).
 - 2020:** Back cover of the Particle & Particle Systems Characterization journal (see article no. 33).
 - 2018:** *Abilitazione Scientifica Nazionale* as *prof. di seconda fascia in Fisica Sperimentale della Materia* (02/B1). Validity: 30 March 2018 – 30 March 2029.
 - 2018:** Frontispiece of the Advanced Materials journal. (See article no. 27).
 - 2015:** Most cited paper of the J. of Renewable and Sustainable Energy (See article no. 9).
 - 2014:** Paper selected for the “Highlights of 2013” of IOP (See article no. 6).
- Conferences** Organizer of Plasmonica 2018. Presentations, also as invited speaker, at many international scientific conferences. See the Attachments for a complete list.
- Reviewer activity** Scientific reviewer for international scientific journals: Advanced Materials (Wiley-VCH), Scientific Reports (Springer Nature), Journal of The Electrochemical Society (ECS), Applied Physics Letters (AIP Publishing), Journal of Alloys and Compounds (Elsevier), and many others.

ACADEMIC RESPONSIBILITIES

- Apr 2021 – current** Member of the Faculty Board of the PhD in Physics and Astronomy at the Univ. of Florence.
- Mar 2023 – current** Delegate of the “Technology Transfer” for the Department of Physics and Astronomy of the University of Florence.
- Jan 2020 – Nov 2021** Delegate of the “Pathways for transversal skills and orientation” (PCTO) for the School of Mathematics, Physics and Natural Sciences of the University of Florence.

TEACHING EXPERIENCE

Thesis supervision at the University of Florence

Jan 2022 – Dec 2025	U.A. Shah. <i>In progress</i> . (PhD)
Apr 2023 – July 2023	V. Parise. Application of non-thermal plasma for tumour cells treatment. (BSc)
Jan 2022 – Apr 2023	P.P. Bonaccini. Hydrogenation effects on the CsPbBr ₃ perovskite. (MSc)
Oct 2019 – Oct 2022	A. Ristori. Single Photon Emitters. (PhD)
Oct 2018 – July 2019	A. Ristori. Laser writing of quantum dots by photonic jets. (MSc)
Oct 2015 – Oct 2018	F. Gabelloni. Optical spectroscopy of advanced materials for energy harvesting. (PhD)
Jan 2016 – Oct 2016	A. Boschetti. Site-controlled single photon sources fabricated with light. (MSc)
Mar 2016 – June 2016	A. Ristori. Stimulated emission in microstructured perovskites. (BSc)
Dec 2014 – Mar 2015	C. Mannucci. Optical characterization of GaAs quantum wells on patterned Si substrates. (BSc)
Mar 2014 – Mar 2015	G. Fiaschi. Optical characterization of site-controlled GaAsN Quantum Dots. (MSc)

University teaching

2022/2023 – current	Physics II. MSc in Physics and Astronomy at UniFi.
2020/2021 – current	State of the art techniques in semiconductor research. PhD in Physics and Astronomy at UniFi.
2014/2015 – current	Solid State Physics Laboratory. MSc in Physics and Astronomy at UniFi.
2014/2015 – current	Physics Laboratory. BSc in Biology at UniFi.
2020/2021 – 2021/2022	Optics Laboratory. BSc in Optics and Optometry at UniFi.
2013/2014	Physics I (mechanics). BSc in Civil, Constr. and Env. Engineering at UniFi.
2013/2014	Physics II (electromagnetism). BSc in Civil, Constr. and Env. Engineering at UniFi.
Apr 2011 and Apr 2012	CdTe and CIGS lectures in the course of “Conventional photovoltaic technologies” for the post-graduate “Master Course in Photovoltaic Engineering” at the University of Rome “Tor Vergata”.
2007/2008 and 2008/2009	Teaching assistant at Sapienza – University of Rome. “Physics 1” course (mechanics and thermodynamics) of the BSc degree program in Mathematics. Head professor: prof. S. Caprara.

Secondary school teaching

Sept 2016	Winner of the national Italian public competition to obtain a permanent position as professor in high schools. Ranked 3rd in Lazio region for Mathematics and Physics class (A027), 3rd for Physics class (A020), and 7th for Mathematics class (A026). All declined in September 2017.
Jan 2013 – June 2013	TFA in mathematics and physics (qualifying program to teach in upper secondary schools) at Sapienza – University of Rome. Qualification obtained on 9 July 2013 with a grade of 99 (out of 100). <i>Classe di abilitazione A027 (ex A049) e a cascata A020, A026, A047.</i>
Jan 2012 – June 2012	Substitute teacher of computer science at the Public Professional Institute Stendhal in Rome.

LANGUAGES

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B2	C1	C1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](https://europa.eu/europass/)

COMPUTER SKILLS

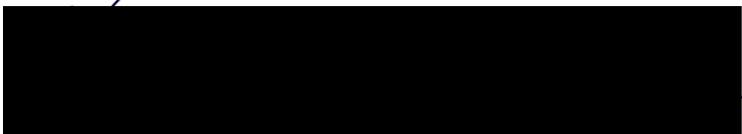
General skills	All Microsoft and Linux OS's. CMD and bash scripting. Microsoft Office and Google Docs.
Languages	Python, MATLAB, C++. (Mainly for data acquisition, instrument control, and data analysis).
Typography	L ^A T _E X: several professional works and author of 3 classes: sapthesis, unifith, graphpaper. Director (since 2020) of the Italian journal about the T _E X world, ArsT _E Xnica (ISSN: 1828-2350).
Websites	HTML, CSS, PHP
Scientific softwares	Origin, KaleidaGraph, MATLAB, ImageJ
Graphic/Audio/Video softwares	Gimp, Inkscape, ImageMagick, ImageJ, VSDC Editor, OBS, StreamYard
Databases	SQL/ORACLE and SAS (1 y work experience). Basic knowledge: Microsoft Access, MySQL.

ATTACHMENTS

Full list of publications
Full list of conferences participation and organization

Firenze, 25/6/2023

Francesco Biccari



Full list of publications

The impact factor refers to the publication date. The asterisk (*) indicates the corresponding author.

Books and book chapters

- 2 **F. Biccari***, N. Falsini, M. Bruzzi, F. Gabelloni, N. Calisi, A. Vinattieri.
 “Defects in perovskites for solar cells and LEDs”.
 Chapter 3 of “Defects in Functional Materials” (Eds.: F. C. Ling, S. Zhou, A. Kuznetsov), World Scientific Publishing, (2020).
 DOI: 10.1142/11352 ISBN: 978-9811203169 Scopus: 2-s2.0-85096262689 WoS: — IF: — F: y
- 1 **F. Biccari***.
 “Defects and doping in Cu₂O”.
 Lulu Press, Inc., (2012). (Publication of F. Biccari’s PhD thesis).
 DOI: — ISBN: 978-1471633812 Scopus: — WoS: — IF: — F: y

Articles

- 44 G. Morello, S. Milanese, M. L. De Giorgi, N. Calisi, S. Caporali, **F. Biccari**, N. Falsini, A. Vinattieri, M. Anni.
 “Temperature-Dependent Amplified Spontaneous Emission in CsPbBr₃ Thin Films Deposited by Single-Step RF-Magnetron Sputtering”.
Nanomaterials, 13 (2023), 306.
 DOI: 10.3390/nano13020306 ISSN: 2079-4991 Scopus: not yet WoS: WOS: not yet IF: 5.719 F: n
- 43 A. Ristori, M. Felici, G. Pettinari, L. Pattelli, **F. Biccari***.
 “Photonic jets and single-photon emitters”.
Advanced Photonics Research, 3 (2022), 2100365.
 DOI: 10.1002/adpr.202100365 ISSN: 2699-9293 Scopus: not yet WoS: WOS: not yet IF: * F: n
- 42 A. Gabbani, G. Campo, V. Bonanni, P. van Rhee, G. Bottaro, C. de Julián Fernández, V. Bello, E. Fantechi, **F. Biccari**, M. Gurioli, L. Armelao, C. Sangregorio, G. Mattei, P. Christianen, F. Pineider.
 “High Magnetic Field Magneto-optics on Plasmonic Silica-Embedded Silver Nanoparticles”.
The Journal of Physical Chemistry C, 126 (2022), 1939.
 DOI: 10.1021/acs.jpcc.1c09900 ISSN: 1932-7447 Scopus: 2-s2.0-85124163421 WoS: WOS:000763576600026 IF: 4.126 F: y
- 41 N. Falsini, G. Roini, A. Ristori, N. Calisi, **F. Biccari**, A. Vinattieri.
 “Analysis of the Urbach tail in cesium lead halide perovskites”.
Journal of Applied Physics, 131 (2022), 010902.
 DOI: 10.1063/5.0076712 ISSN: 0021-8979 Scopus: 2-s2.0-85122975971 WoS: WOS:000744546600005 IF: 2.546 F: y
- 40 A. Ristori, T. Hamilton, D. Toliopoulos, M. Felici, G. Pettinari, S. Sanguinetti, M. Gurioli, H. Mohseni, **F. Biccari***.
 “Photonic jet writing of quantum dots self-aligned to dielectric microspheres”.
Advanced Quantum Technologies, 4 (2021), 2100045.
 DOI: 10.1002/qute.202100045 ISSN: 2511-9044 Scopus: 2-s2.0-85110069610 WoS: WOS:000673999100001 IF: * F: y
 Winner of front cover (*Advanced Quantum Technologies*, 4 (2021), 2170091)
- 39 N. Falsini, A. Ristori, **F. Biccari**, N. Calisi, G. Roini, P. Scardi, S. Caporali, A. Vinattieri.
 “A new route for caesium lead halide perovskite deposition”.
Journal of the European Optical Society - Rapid Publications, 17 (2021), 8.
 DOI: 10.1186/s41476-021-00153-y ISSN: 1990-2573 Scopus: 2-s2.0-85107190216 WoS: WOS:000657316300001 IF: 1.239 F: y
- 38 N. Falsini, N. Calisi, G. Roini, A. Ristori, **F. Biccari**, P. Scardi, C. Barri, M. Bollani, S. Caporali, A. Vinattieri..
 “Large-area nanocrystalline caesium lead chloride thin films: a focus on the exciton recombination dynamics”.
Nanomaterials, 11 (2021), 434.
 DOI: 10.3390/nano11020434 ISSN: 2079-4991 Scopus: 2-s2.0-85100555918 WoS: WOS:000622910500001 IF: 4.324 F: y
- 37 G. Pettinari, G. Marotta, **F. Biccari**, A. Polimeni, M. Felici.
 “Tailoring the optical properties of dilute nitride semiconductors at the nanometer scale”.
Nanotechnology, 32 (2021), 185301.
 DOI: 10.1088/1361-6528/abe073 ISSN: 0957-4484 Scopus: 2-s2.0-85102322405 WoS: WOS:000620503400001 IF: 3.551 F: y

- 36 D. Tjeertes, T.J.F. Verstijnen, A. Gonzalo, J.M. Ulloa, M.S. Sharma, M. Felici, A. Polimeni, **F. Biccari**, M. Gurioli, G. Pettinari, C. Şahin, M.E. Flatté, P.M. Koenraad. “N-nH complexes in GaAs studied at the atomic scale by cross-sectional scanning tunneling microscopy”. *Physical Review B*, 102 (2020), 125304.
DOI: 10.1103/PhysRevB.102.125304 ISSN: 1098-0121 Scopus: 2-s2.0-85093362845 WoS: WOS:000568191200004 IF: 3.736 F: y
- 35 M. Felici, G. Pettinari, **F. Biccari**, A. Boschetti, S. Younis, S. Birindelli, M. Gurioli, A. Vinattieri, A. Gerardino, L. Businaro, M. Hopkinson, S. Rubini, M. Capizzi, A. Polimeni. “Broadband enhancement of light-matter interaction in photonic crystal cavities integrating site-controlled quantum dots”. *Physical Review B*, 101 (2020), 205403.
DOI: 10.1103/PhysRevB.101.205403 ISSN: 1098-0121 Scopus: 2-s2.0-85085842662 WoS: WOS:000530162300007 IF: 3.736 F: y
- 34 C. Borri, N. Calisi, E. Galvanetto, N. Falsini, **F. Biccari**, A. Vinattieri, G. Cucinotta, S. Caporali. “First proof-of-principle of inorganic lead halide perovskites deposition by magnetron-sputtering”. *Nanomaterials*, 10 (2020), 60.
DOI: 10.3390/nano10010060 ISSN: 2079-4991 Scopus: 2-s2.0-85077432588 WoS: WOS:000516825600060 IF: 4.034 F: y
- 33 **F. Biccari***, T. Hamilton, S. Sanguinetti, S. Bietti, A. Vinattieri, M. Gurioli, H. Mohseni. “Quantum dots luminescence collection enhancement and nanoscopy by dielectric microspheres”. *Particle & Particle Systems Characterization*, 37 (2020, 2019 online), 1900431.
DOI: 10.1002/ppsc.201900431 ISSN: 1521-4117 Scopus: 2-s2.0-85076901131 WoS: WOS:000502619900001 IF: 4.194 F: y
Winner of back cover (*Particle & Particle Systems Characterization*, 37 (2020), 2070004)
- 32 A. Ballabio, S. Bietti, A. Scaccabarozzi, L. Esposito, S. Vichi, A. Fedorov, A. Vinattieri, C. Mannucci, **F. Biccari**, Á. Nemcsis, L. Toth, L. Miglio, M. Gurioli, G. Isella, S. Sanguinetti. “GaAs epilayers grown on patterned (001) silicon substrates via suspended Ge layers”. *Scientific Reports*, 9 (2019), 17529.
DOI: 10.1038/s41598-019-53949-x ISSN: 2045-2322 Scopus: 2-s2.0-85075604533 WoS: WOS:000498596800002 IF: 4.011 F: y
- 31 F. Gabelloni, **F. Biccari**, N. Falsini, N. Calisi, S. Caporali, A. Vinattieri. “Long-living nonlinear behavior in CsPbBr₃ carrier recombination dynamics”. *Nanophotonics*, 8 (2019), 1447.
DOI: 10.1515/nanoph-2019-0013 ISSN: 2192-8614 Scopus: 2-s2.0-85064667641 WoS: WOS:000483308200002 IF: 6.01 F: y
- 30 A. Gerardino, G. Pettinari, N. Caselli, S. Vignolini, F. Riboli, **F. Biccari**, M. Felici, A. Polimeni, A. Fiore, M. Gurioli, F. Intonti. “Coupled Photonic Crystal Nanocavities as a Tool to Tailor and Control Photon Emission”. *Ceramics*, 2 (2019), 34.
DOI: 10.3390/ceramics2010004 ISSN: 2571-6131 Scopus: 2-s2.0-85073285375 WoS: WOS:000706492800001 IF: * F: n
- 29 E. Durán-Valdeiglesias, W. Zhang, C. Alonso-Ramos, S. Serna, X. Le Roux, D. Maris-Morini, N. Caselli, **F. Biccari**, M. Gurioli, A. Filoramo, E. Cassan, L. Vivien. “Tailoring carbon nanotubes optical properties through chirality-wise silicon ring resonators”. *Scientific reports*, 8 (2018), 11252.
DOI: 10.1038/s41598-018-29300-1 ISSN: 2045-2322 Scopus: 2-s2.0-85050656558 WoS: WOS:000439805700013 IF: 4.122 F: y
- 28 G. Pettinari, M. Felici, **F. Biccari**, M. Capizzi, A. Polimeni. “Site-controlled quantum emitters in dilute nitrides and their integration in photonic crystal cavities”. *Photonics*, 5 (2018), 10.
DOI: 10.3390/photonics5020010 ISSN: 2304-6732 Scopus: 2-s2.0-85048927008 WoS: WOS:000436510400005 IF: 2.676* F: y
- 27 **F. Biccari***, A. Boschetti, G. Pettinari, F. La China, M. Gurioli, F. Intonti, A. Vinattieri, M. S. Sharma, M. Capizzi, A. Gerardino, L. Businaro, M. Hopkinson, A. Polimeni, M. Felici. “Site-controlled single-photon emitters fabricated by near field illumination”. *Advanced Materials*, 30 (2018), 1705450.
DOI: 10.1002/adma.201705450 ISSN: 1521-4095 Scopus: 2-s2.0-85044747230 WoS: WOS:000434032600001 IF: 19.79 F: y
Highest impact factor among F. Biccari's publications. Winner of internal cover (*Advanced Materials*, 30 (2018), 1870147)
- 26 M. Felici, G. Pettinari, **F. Biccari**, M. Capizzi, A. Polimeni. “Spatially selective hydrogen irradiation of dilute nitride semiconductors: a brief review”. *Semiconductor Science and Technology*, 33 (2018), 053001.
DOI: 10.1088/1361-6641/aab3f1 ISSN: 0268-1242 Scopus: 2-s2.0-85046682948 WoS: WOS:000428873000001 IF: 2.31 F: y
- 25 N. Caselli, F. Intonti, F. La China, **F. Biccari**, F. Riboli, A. Gerardino, Lianhe Li, E. H. Linfield, F. Pagliano, A. Fiore, M. Gurioli. “Generalized Fano lineshapes reveal exceptional points in photonic molecules”. *Nature Communications*, 9 (2018), 396.
DOI: 10.1038/s41467-018-02855-3 ISSN: 2041-1723 Scopus: 2-s2.0-85041124791 WoS: WOS:000423430900016 IF: 12.12 F: y

- 24 F. Gabelloni, **F. Biccari***, G. Andreotti, D. Balestri, S. Checcucci, A. Milanese, N. Calisi, S. Caporali, A. Vinattieri. "Recombination dynamics in CsPbBr₃ nanocrystals: role of surface states". *Optical Materials Express*, 7 (2017), 4367.
DOI: 10.1364/OME.7.004367 ISSN: 2159-3930 Scopus: 2-s2.0-85036475335 WoS: WOS:000417036200017 IF: 2.591 F: y
- 23 **F. Biccari***, L. Esposito, C. Mannucci, A. G. Taboada, S. Bietti, A. Ballabio, A. Fedorov, G. Isella, H. von Känel, L. Miglio, S. Sanguinetti, A. Vinattieri, M. Gurioli. "Site-controlled Natural GaAs(111) quantum dots fabricated on vertical GaAs/Ge microcrystals on deeply patterned Si(001) substrates". *Nanoscience and Nanotechnology Letters*, 9 (2017), 1108.
DOI: 10.1166/nnl.2017.2440 ISSN: 1941-4900 Scopus: 2-s2.0-85027965984 WoS: WOS:000410792700018 IF: 1.889 F: y
- 22 **F. Biccari**, F. Gabelloni, E. Burzi, M. Gurioli, S. Pescetelli, A. Agresti, A. E. Del Rio Castillo, A. Ansaldo, E. Kymakis, F. Bonaccorso, A. Di Carlo, A. Vinattieri. "Graphene-based electron transport layers in perovskite solar cells: a step-up for an efficient carrier collection". *Advanced Energy Materials*, 7 (2017), 1701349.
DOI: 10.1002/aenm.201701349 ISSN: 1614-6840 Scopus: 2-s2.0-85028617881 WoS: WOS:000417350000030 IF: 16.721 F: y
- 21 T. H. C. Hoang, E. Durán-Valdeiglesias, C. Alonso-Ramos, S. Serna, W. Zhang, M. Balestrieri, A. Keita, N. Caselli, **F. Biccari**, X. Le Roux, A. Filoramo, M. Gurioli, L. Vivien, E. Cassan. "Narrow-linewidth carbon nanotube emission in silicon hollow-core photonic crystal cavity". *Optics Letters*, 42 (2017), 2228.
DOI: 10.1364/OL.42.002228 ISSN: 0146-9592 Scopus: 2-s2.0-85020434585 WoS: WOS:000403534700045 IF: 3.416 F: y
- 20 N. Caselli, F. Intonti, F. La China, **F. Biccari**, F. Riboli, A. Gerardino, L. Li, E. H. Linfield, F. Pagliano, A. Fiore, M. Gurioli. "Near-field speckle imaging of light localization in disordered photonic systems". *Applied Physics Letters*, 110 (2017), 081102.
DOI: 10.1063/1.4976747 ISSN: 0003-6951 Scopus: 2-s2.0-85013855312 WoS: WOS:000394762600002 IF: 3.142 F: y
- 19 N. Caselli, T. H. C. Hoang, X. Le Roux, F. Sarti, **F. Biccari**, F. La China, F. Intonti, A. Vinattieri, L. Vivien, E. Cassan, M. Gurioli. "Vectorial near-field imaging of silicon heterostructure cavities in air-slot waveguides". *IEEE Photonics Technology Letters*, 29 (2017), 571.
DOI: 10.1109/LPT.2017.2664900 ISSN: 1041-1135 Scopus: 2-s2.0-85015730773 WoS: WOS:000398611700004 IF: 1.945 F: y
- 18 G. Pettinari, A. Gerardino, L. Businaro, A. Polimeni, M. Capizzi, M. Hopkinson, S. Rubini, **F. Biccari**, F. Intonti, A. Vinattieri, M. Gurioli, M. Felici. "A lithographic approach for quantum dot-photonic crystal nanocavity coupling in dilute nitrides". *Microelectronic Engineering*, 174 (2017, 2016 online), 16.
DOI: 10.1016/j.mee.2016.12.003 ISSN: 0167-9317 Scopus: 2-s2.0-85006976062 WoS: WOS:000401381000005 IF: 1.277 F: y
- 17 **F. Biccari***, F. Sarti, N. Caselli, A. Vinattieri, E. Durán-Valdeiglesias, W. Zhang, C. Alonso-Ramos, T. H. C. Hoang, S. Serna, X. Le Roux, E. Cassan, L. Vivien, M. Gurioli. "Single walled carbon nanotubes emission coupled with a silicon slot-ring resonator". *Journal of Luminescence*, 191 (2017, 2016 online), 126.
DOI: 10.1016/j.jlumin.2016.11.040 ISSN: 0022-2313 Scopus: 2-s2.0-85007049097 WoS: WOS:000410017300010 IF: 2.693 F: y
- 16 **F. Biccari**, S. Bietti, L. Cavigli, A. Vinattieri, R. Nötzel, M. Gurioli, S. Sanguinetti. "Temperature activated coupling in topologically distinct semiconductor nanostructures". *Journal of Applied Physics*, 120 (2016), 134312.
DOI: 10.1063/1.4963718 ISSN: 0021-8979 Scopus: 2-s2.0-84990864120 WoS: WOS:000386155100018 IF: 2.101 F: y
- 15 F. La China, N. Caselli, F. Sarti, **F. Biccari**, U. Torrini, F. Intonti, A. Vinattieri, E. Durán-Valdeiglesias, C. Alonso Ramos, X. Le Roux, M. Balestrieri, A. Filoramo, L. Vivien, M. Gurioli. "Near-field imaging of single walled carbon nanotubes emitting in the telecom wavelength range". *Journal of Applied Physics*, 120 (2016), 123110.
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Full list of conference participation and organization

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Organization

- 1 Organizing committee: **F. Biccari**, F. Intonti, F. Pineider, C. Toninelli.
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Laser writing of Quantum Dots by Photonic Nanojets.
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- 17 N. Falsini, G. Roini, **F. Biccari***, A. Ristori, P. Scardi, N. Calisi, S. Caporali, A. Vinattieri.
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- 9 **F. Biccari***, F. Sarti, N. Caselli, A. Vinattieri, E. Durán-Valdeiglesias, W. Zhang, C. Alonso-Ramos, T. H. C. Hoang, S. Serna, X. Le Roux, E. Cassan, L. Vivien, M. Gurioli.
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- 1 **F. Biccari***, C. Malerba, A. Mittiga.
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