

PERSONAL INFORMATION

Francesco Biccari



 Via [REDACTED], Italy

 + [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/cefr/)

COMPUTER SKILLS

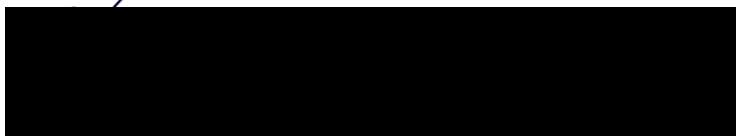
General skills	All Microsoft and Linux OS's. CMD and bash scripting. Microsoft Office and Google Docs.
Languages	Python, MATLAB, C++. (Mainly for data acquisition, instrument control, and data analysis).
Typography	L ^A T _E X: several professional works and author of 3 classes: sapthesis, unifith, graphpaper. 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.
DOI: 10.1063/1.4963367 ISSN: 0021-8979 Scopus: 2-s2.0-84989186747 WoS: WOS:000385560700010 IF: 2.101 F: y
- 14 E. Durán-Valdeiglesias, W. Zhang, A. Noury, C. Alonso-Ramos, T. H. C. Hoang, S. Serna, X. Le Roux, E. Cassan, N. Izard, F. Sarti, U. Torrini, **F. Biccari**, A. Vinattieri, M. Balestrieri, A. Keita, H. Yang, V. Bezugly, G. Cuniberti, A. Filoramo, M. Gurioli, L. Vivien.
"Integration of carbon nanotubes in silicon strip and slot waveguide micro-ring resonators".
IEEE Transactions on Nanotechnology, 15 (2016), 583.
DOI: 10.1109/TNANO.2016.2556225 ISSN: 1536-125X Scopus: 2-s2.0-84978737275 WoS: WOS:000380026400003 IF: 2.485 F: y

- 13 F. Sarti, **F. Biccari**, F. Fioravanti, U. Torrini, A. Vinattieri, V. Derycke, M. Gurioli, A. Filoramo.
“Highly selective sorting of semiconducting single-walled carbon nanotubes for light emission at telecom wavelengths”.
Nano Research, 9 (2016), 2478.
DOI: 10.1007/s12274-016-1134-6 ISSN: 1998-0124 Scopus: 2-s2.0-84976407445 WoS: WOS:000380726200026 IF: 7.010 F: y
- 12 N. Caselli, F. Riboli, F. Intonti, F. La China, **F. Biccari**, A. Gerardino, M. Gurioli.
“Spatial steadiness of individual disorder modes upon controlled spectral tuning”.
APL Photonics, 1 (2016), 041301.
DOI: 10.1063/1.4946852 ISSN: 2378-0967 Scopus: 2-s2.0-85013750493 WoS: WOS:000385588400002 IF: 5.672* F: y
- 11 V. Latini, E. Tisbi, E. Placidi, F. Patella, **F. Biccari**, M. Gurioli, A. Vinattieri, F. Arciprete.
“Tuning the growth for a selective nucleation of chains of Quantum Dots behaving as single photon emitters”.
Journal of Crystal Growth, 457 (2017, 2016 online), 177.
DOI: 10.1016/j.jcrysgro.2016.06.045 ISSN: 0022-0248 Scopus: 2-s2.0-84996791571 WoS: WOS:000389590700031 IF: 1.698 F: y
- 10 N. Dotti, F. Sarti, S. Bietti, A. Azarov, A. Kuznetsov, **F. Biccari**, A. Vinattieri, S. Sanguinetti, M. Abbarchi, M. Gurioli.
“Germanium-based quantum emitters towards a time-reordering entanglement scheme with degenerate exciton and biexciton states”.
Physical Review B, 91 (2015), 205316.
DOI: 10.1103/PhysRevB.91.205316 ISSN: 1098-0121 Scopus: 2-s2.0-84930960069 WoS: WOS:000355315400005 IF: 3.664 F: y
- 9 C. Malerba, C. L. Azanza Ricardo, M. Valentini, **F. Biccari**, M. Müller, L. Rebuffi, E. Esposito, P. Mangiapane, P. Scardi, A. Mittiga.
“Stoichiometry effect on Cu₂ZnSnS₄ thin films morphological and optical properties”.
Journal of Renewable and Sustainable Energy, 6 (2014), 011404.
DOI: 10.1063/1.4866258 ISSN: 1941-7012 Scopus: 2-s2.0-84901844916 WoS: WOS:000332320200014 IF: 1.510 F: y
“Most Cited Articles of the Journal of Renewable and Sustainable Energy from 2015”
- 8 C. Malerba, **F. Biccari**, C. L. Azanza Ricardo, M. Valentini, R. Chierchia, M. Müller, A. Santoni, E. Esposito, P. Mangiapane, P. Scardi, A. Mittiga.
“CZTS stoichiometry effects on the band gap energy”.
Journal of Alloys and Compounds, 582 (2014, 2013 online), 528.
DOI: 10.1016/j.jallcom.2013.07.199 ISSN: 0925-8388 Scopus: 2-s2.0-84883636490 WoS: WOS:000325468100087 IF: 2.390 F: y
- 7 F. Nanni, F. R. Lamastra, F. Franceschetti, **F. Biccari**, I. Cacciotti.
“Mo-doped indium oxide films by dip-coating: synthesis, microstructure and optical properties”.
Ceramics International, 40 (2014, 2013 online), 1851.
DOI: 10.1016/j.ceramint.2013.07.087 ISSN: 0272-8842 Scopus: 2-s2.0-84888016291 WoS: WOS:000330820600074 IF: 1.789 F: y
- 6 A. Santoni, **F. Biccari**, C. Malerba, M. Valentini, R. Chierchia and A. Mittiga.
“Valence Band Offset at the CdS/Cu₂ZnSnS₄ interface probed by X-ray Photoelectron Spectroscopy”.
Journal of Physics D: Applied Physics, 46 (2013), 175101.
DOI: 10.1088/0022-3727/46/17/175101 ISSN: 0022-3727 Scopus: 2-s2.0-84876502242 WoS: WOS:000317389600008 IF: 2.544 F: y
Selected for Highlight of 2013 of IOP
- 5 C. Malerba, C. L. Azanza Ricardo, M. D’Incau, **F. Biccari**, P. Scardi, A. Mittiga.
“Nitrogen doped Cu₂O: a possible material for intermediate band solar cells?”.
Solar Energy Materials and Solar Cells, 105 (2012), 192.
DOI: 10.1016/j.solmat.2012.06.017 ISSN: 0927-0248 Scopus: 2-s2.0-84862986201 WoS: WOS:000308386000029 IF: 4.593 F: y
- 4 **F. Biccari***, R. Chierchia, M. Valentini, P. Mangiapane, E. Salza, C. Malerba, C. L. Azanza Ricardo, L. Mannarino, P. Scardi, A. Mittiga.
“Fabrication of Cu₂ZnSnS₄ solar cells by sulfurization of evaporated precursors”.
Energy Procedia, 10 (2011), 187.
DOI: 10.1016/j.egypro.2011.10.175 ISSN: 1876-6102 Scopus: 2-s2.0-84855711373 WoS: WOS:000300392800033 IF: — F: y
- 3 C. Malerba, **F. Biccari***, C. L. Azanza Ricardo, M. D’Incau, P. Scardi, A. Mittiga.
“Absorption coefficient of bulk and thin film Cu₂O”.
Solar Energy Materials and Solar Cells, 95 (2011), 2848.
DOI: 10.1016/j.solmat.2011.05.047 ISSN: 0927-0248 Scopus: 2-s2.0-79960554819 WoS: WOS:000293936300019 IF: 3.858 F: y
Most cited paper of F. Biccari
- 2 **F. Biccari***, C. Malerba, A. Mittiga.
“Chlorine doping of Cu₂O”.
Solar Energy Materials and Solar Cells, 94 (2010), 1947.
DOI: 10.1016/j.solmat.2010.06.022 ISSN: 0927-0248 Scopus: 2-s2.0-77957140244 WoS: WOS:000283566300021 IF: 3.858 F: y

1 A. Mittiga, **F. Biccari**, C. Malerba.

"Intrinsic defects and metastability effects in Cu₂O".

Thin Solid Films, 517 (2009, 2008 online), 2469.

DOI: 10.1016/j.tsf.2008.11.054 ISSN: 0040-6090 Scopus: 2-s2.0-58949089548 WoS: WOS:000263847300086 IF: 1.884 F: y

Conference proceedings and other publications

Only the proceedings indexed on Scopus are numbered.

8 A. Ristori, T. Hamilton, M. Felici, G. Pettinari, M. Gurioli, H. Mohseni, **F. Biccari**.

"Photonic jets writing of quantum dots with intrinsic photoluminescence collection enhancement".

Nuovo Cimento C (Proc. of the Italian Physical Society (SIF) Annual Meeting 13-17 Sept. 2021), Vol. 45 (2022), 179.

DOI: 10.1393/ncc/i2022-22179-3 Scopus: not yet WoS: — IF: — F: n

– N. Falsini, N. Calisi, G. Roini, A. Ristori, **F. Biccari**, P. Scardi, C. Borri, S. Caporali, A. Vinattieri.

"A new route for high quality nanometric films of inorganic halide perovskites".

Proc. of the European Optical Society (EOS) Annual Meeting (EOSAM2020), EPJ Web Conf., Vol. 238, 07004 (Aug. 2020).

DOI: epjconf/202023807004 Scopus: — WoS: — IF: — F: n

– E. Durán-Valdeiglesias, W. Zhang, C. Alonso-Ramos, S. Serna, X. Le Roux, D. Marris-Morini, M. Reig, N. Casselli, **F. Biccari**, M. Gurioli, A. Filoramo, E. Cassan, L. Vivien.

"Shaping the optical properties of carbon nanotubes via chirality-selective resonant enhancement in silicon micro-ring resonators".

Proc. of the 2019 European Conference on Integrated Optics, Ghent, Belgium, (2019), Poster session 1.

DOI: — Scopus: — WoS: — IF: — F: n

7 M. Felici, G. Pettinari, **F. Biccari**, S. Younis, M. Sharma, S. Rubini, A. Gerardino, M. Gurioli, A. Vinattieri, F. Intonti, A. Polimeni.

"Spatially Selective Hydrogen Irradiation/Removal of Dilute Nitrides: A Versatile Nanofabrication Tool for Photonic Applications".

Proc. of the Quantum Information and Measurement (QIM) V: Quantum Technologies, Rome, (2019), T5A.27.

DOI: 10.1364/QIM.2019.T5A.27 ISBN: 978-1943580569 Scopus: 2-s2.0-85085661482 WoS: — IF: — F: n

– E. Durán-Valdeiglesias, W. Zhang, C. A. Alonso-Ramos, T. H. C. Hoang, S. Serna, X. Le Roux, M. Balestrieri, D. Marris-Morini, N. Caselli, **F. Biccari**, M. Gurioli, A. Filoramo, E. Cassan, L. Vivien.

"Shaping on-chip optical properties of hybrid silicon carbon nanotube photonics circuits (Conference Presentation)".

Proc. of the conference SPIE OPTO 2019, San Francisco (Smart Photonic and Optoelectronic Integrated Circuits XXI), 10922, (2019), 109221N.

DOI: 10.1117/12.2508550 ISBN: — Scopus: — WoS: — IF: — F: n

6 F. Gabelloni, D. Balestri, **F. Biccari**, G. Andreotti, F. Intonti, N. Calisi, S. Caporali, A. Vinattieri.

"Near-field optical spectroscopy of CsPbBr₃ microstructures".

Proc. of the OSA Advanced Photonics Congress 2018, Zürich, (2018), JTU2A.21.

DOI: 10.1364/BGPPM.2018.JTU2A.21 ISBN: 978-1943580439 Scopus: 2-s2.0-85051242615 WoS: — IF: — F: y

– E. Cassan, W. Zhang, E. Durán-Valdeiglesias, X. Le Roux, S. Serna, N. Caselli, **F. Biccari**, C. Alonso-Ramos, A. Filoramo, M. Gurioli, L. Vivien.

"Hybrid integration of carbon nanotube emitters into silicon photonic nanoresonators (Conference Presentation)".

Proc. of the conference SPIE OPTO 2018, San Francisco (Silicon Photonics XIII, Conference 10537), 10537 (2018), 105370Y.

DOI: 10.1117/12.2289049 ISSN: 2304-6732 Scopus: — WoS: — IF: — F: y

5 W. Zhang, E. Durán-Valdeiglesias, S. Serna, N. Caselli, **F. Biccari**, C. Alonso-Ramos, X. Le Roux, A. Filoramo, M. Gurioli, L. Vivien, E. Cassan.

"Efficient excitation of silicon photonic cavity modes from carbon nanotube photoluminescence".

Proc. of the Asia Communications and Photonics Conference (ACP 2017), Guangzhou, China, (2017), S3J.3.

DOI: 10.1364/ACPC.2017.S3J.3 ISBN: 978-1943580347 Scopus: 2-s2.0-85044785872 WoS: — IF: — F: y

4 E. Durán-Valdeiglesias, W. Zhang, T. H. C. Hoang, C. Alonso-Ramos, X. Le Roux, S. Serna, M. Balestrieri, D. Marris-Morini, F. Intonti, F. Sarti, N. Caselli, F. La China, **F. Biccari**, M. Gurioli, A. Filoramo, E. Cassan, L. Vivien.

"Integration of carbon nanotubes on silicon photonics resonators".

Proc. of the 14th International Conference on Group IV Photonics (GFP 2017), Berlin, Germany, (2017), 55-56.

DOI: 10.1109/GROUP4.2017.8082193 ISBN: 978-1509065684 Scopus: 2-s2.0-85040162444 WoS: — IF: — F: y

3 **F. Biccari**, A. Ristori, F. Gabelloni, C. Francioni, F. La China, N. Caselli, F. Intonti, M. Gurioli, J. Lee, S. Leblebici, A. Weber-Bargioni, A. Vinattieri.

"Superlinear emission in bare perovskite: amplified spontaneous emission in disordered film versus single crystal lasing".

- Materials Today: Proceedings. (EMRS Spring Meeting 2016)*, 4 (2017), S12.
DOI: 10.1016/j.matpr.2017.05.005 ISSN: 2214-7853 Scopus: 2-s2.0-85028587648 WoS: WOS:000410611100003 IF: — F: y
- E. Durán-Valdeiglesias, W. Zhang, T. H. C. Hoang, C. Alonso-Ramos, S. Serna, X. Le Roux, E. Cassan, M. Balestrieri, A. Keita, F. Sarti, **F. Biccari**, U. Torrini, A. Vinattieri, H. Yang, V. Bezugly, G. Cuniberti, A. Filoramo, M. Gurioli, L. Vivien.
“Integration of carbon nanotubes in slot waveguides (Conference Presentation)”.
Proc. of the conference SPIE Photonics Europe 2016, Brussel (Silicon Photonics and Photonic Integrated Circuits V, Conference 9891), (2016), 98910Q.
DOI: 10.1117/12.2229347 ISBN: 978-1510601369 Scopus: — WoS: WOS:000391521900018 IF: — F: y
- 2 F. Sarti, N. Caselli, F. La China, **F. Biccari**, U. Torrini, F. Intonti, A. Vinattieri, E. Durán-Valdeiglesias, W. Zhang, A. Noury, C. Alonso-Ramos, T. H. C. Hoang, S. Serna, X. Le Roux, E. Cassan, N. Izard, H. Yang, V. Bezugly, G. Cuniberti, A. Filoramo, L. Vivien, M. Gurioli.
“Coupling of semiconductor carbon nanotubes emission with silicon photonic micro ring resonators”.
Proc. of the conference SPIE Photonics Europe 2016, Brussel (Silicon Photonics and Photonic Integrated Circuits V, Conference 9891), (2016), 98910P.
DOI: 10.1117/12.2234979 ISBN: 978-1510601369 Scopus: 2-s2.0-84982252190 WoS: WOS:000391521900017 IF: — F: y
- 1 S. Sanguinetti, S. Bietti, D. Scarpellini, A. Ballabio, L. Miglio, G. Isella, L. Esposito, J. Frigerio, A. Fedorov, M. Gurioli, **F. Biccari**, M. Abbarchi, A. Vinattieri.
“GaAs nanostructures on Si platform”.
Proc. of the Opto-Electronics and Communications Conference (OECC), 2015, (2015), 1–3.
DOI: 10.1109/OECC.2015.7340229 ISBN: 978-1467379441 Scopus: 2-s2.0-84960932462 WoS: — IF: — F: y
- **F. Biccari***.
“Math Girls by Hiroshi Yuki”.
In Image Maths 4, p. 53 (2015). Ed. M. Emmer, M. Abate, M. Villarreal.
Istituto Veneto di Scienze, Lettere ed Arti, Venezia - Unione Matematica Italiana, Bologna
Proc. of the "Mathematics and Culture 2014" conference, Venice, 2014. (Invited), .
DOI: — ISBN: 9788896336151 Scopus: — WoS: — IF: — F: n
- **F. Biccari***, C. Malerba, A. Mittiga.
“Impurity effects in Cu₂O”.
arXiv preprint, 1310.5341 (2013). URL: <http://arxiv.org/abs/1310.5341>.
DOI: — Scopus: — WoS: — IF: — F: n
- M. Valentini, C. Malerba, **F. Biccari**, E. Salza, A. Santoni, C.L. Azanza Ricardo, P. Scardi, A. Mittiga.
“Study of CZTS Solar Cells Obtained from Two Different Types of Precursors”.
Proc. of the 28th European Photovoltaic Solar Energy Conference, Paris, France, (2013), p. 2459.
DOI: 10.4229/28thEUPVSEC2013-3BV.6.64 ISBN: 3-936338-33-7 Scopus: — WoS: — IF: — F: y
- M. Valentini, C. Malerba, **F. Biccari***, R. Chierchia, P. Mangiapane, E. Salza, A. Mittiga.
“Growth and characterization of Cu₂ZnSnS₄ thin films prepared by sulfurization of evaporated precursors”.
Proc. of the 26th European Photovoltaic Solar Energy Conference, Hamburg, Germany, (2011), p. 2911.
DOI: 10.4229/26thEUPVSEC2011-3DV.1.52 ISBN: 3-936338272 Scopus: — WoS: — IF: — F: y
- **F. Biccari**, C. Malerba, A. Mittiga.
“Metastability effects in Cu₂O solar cells”.
Proc. of the 23rd European Photovoltaic Solar Energy Conference, Valencia, Spain, (2008), p. 583.
DOI: 10.4229/23rdEUPVSEC2008-1CV.2.54 ISBN: 3-936338248 Scopus: — WoS: — IF: — F: y

Full list of conference participation and organization

The asterisk (*) indicates the presenting author.

Organization

- 1 Organizing committee: **F. Biccari**, F. Intonti, F. Pineider, C. Toninelli.
Plasmonica 2018. (website <http://www.plasmonica.it/2018/>)
Florence, University of Florence, 4 – 6 July 2018.

Participation

- 18 A. Ristori, T. Hamilton, M. Felici, G. Pettinari, M. Gurioli, H. Mohseni, **F. Biccari***.
Laser writing of Quantum Dots by Photonic Nanojets.
ICPS 2022 (International Conference on the Physics of Semiconductors)
Sydney (Australia), 27 – 30 June 2022.
- 17 N. Falsini, G. Roini, **F. Biccari***, A. Ristori, P. Scardi, N. Calisi, S. Caporali, A. Vinattieri.
High quality metal halide perovskite thin films by Radio-Frequency Magnetron Sputtering.
ICPS 2022 (International Conference on the Physics of Semiconductors)
Sydney (Australia), 27 – 30 June 2022.
- 16 **INVITED F. Biccari***, A. Ristori, N. Falsini, N. Calisi, S. Caporali, A. Surrente, S. Cianci, P. Scardi, M. Felici, A. Vinattieri.
Sputtering of fully inorganic caesium lead halide perovskites and passivation of their defects by hydrogen treatment.
EMRS Fall meeting 2021 (European Material Research Society Conference)
Warsaw (Poland), online conference due to COVID-19, 20 – 23 September 2021.
- 15 **INVITED F. Biccari***.
Novel Fabrication Techniques of GaAsN Quantum Dots.
Talk at the Norwegian University of Science and Technology (NTNU), Trondheim, Norway. 27 February 2020.
- 14 **F. Biccari***, F. Gabelloni, G. Andreotti, M. Gurioli, N. Calisi, S. Caporali, A. Vinattieri.
Carrier cooling dynamics in inorganic perovskites.
ICPS 2018 (International Conference on the Physics of Semiconductors).
Montpellier (France), Corum conference center, 29 July – 3 August 2018.
- 13 **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.
ICPS 2018 (International Conference on the Physics of Semiconductors).
Montpellier (France), Corum conference center, 29 July – 3 August 2018.
- 12 **INVITED F. Biccari***, F. Gabelloni, G. Andreotti, D. Balestri, S. Checcucci, M. Gurioli, N. Calisi, A. Milanese, S. Caporali, M. Bruzzi, A. Vinattieri.
Metal Halide Perovskites: A New Route in Optoelectronics.
ICAE 2017 (International Conference on Advanced Electromaterials).
Jeju (South Korea), Ramada Plaza Jeju Hotel, 21 – 24 November 2017.
- 11 **INVITED F. Biccari***, F. La China, A. Boschetti, G. Fiaschi, F. Intonti, A. Vinattieri, M. Gurioli, M. Felici, S. Birindelli, A. Polimeni, M. Capizzi, G. Pettinari, L. Businaro, A. Gerardino, S. Rubini.
Site-controlled Quantum Dots for nanophotonics applications.
Advances in Photonics and Applications 2016.
Firenze (Italy), Palazzo Nonfinito, 9 – 10 June 2016.
- 10 **F. Biccari***, F. Gabelloni, C. Francioni, F. La China, N. Caselli, F. Intonti, M. Gurioli, J. Lee, S. Leblebici, A. Weber-Bargioni, A. Vinattieri.
Superlinear emission in bare perovskite: amplified spontaneous emission in disordered film versus single crystal lasing.
EMRS Spring Meeting 2016 (European Material Research Society Conference).
Lille (France), Grand Palais, 2 – 6 May 2016.
Note: See proceedings n. 3.
- 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.
Single walled carbon nanotubes emission coupled with a silicon slot-ring resonator.
EMRS Spring Meeting 2016 (European Material Research Society Conference).

Lille (France), Grand Palais, 2 – 6 May 2016.

Note: The conference paper has been selected as one of the best and it was awarded with the publication in the Elsevier Journal of Photoluminescence (see paper n. 17).

- 8 **F. Biccari***, F. La China, A. Boschetti, F. Intonti, A. Vinattieri, M. Gurioli, M. Felici, A. Polimeni, M. Capizzi, S. Birindelli, G. Pettinari, A. Gerardino.

Making quantum light emitters with light.

EMRS Spring Meeting 2016 (European Material Research Society Conference).

Lille (France), Grand Palais, 2 – 6 May 2016.

- 7 **F. Biccari***, G. Fiaschi, F. Sarti, A. Vinattieri, M. Gurioli, S. Birindelli, M. Felici, G. Pettinari, A. Gerardino, A. Polimeni, M. Capizzi.

Optical characterization of site-controlled quantum dots obtained by hydrogenation of Ga(AsN)/GaAs quantum wells.

ICDS 2015 (International Conference on Defects in Semiconductors).

Espoo (Finland), Otaniemi campus of the Aalto University, 27 – 31 July 2015.

- 6 F. Sarti, **F. Biccari***, F. Fioravanti, U. Torrini, A. Vinattieri, M. Gurioli, A. Filoramo, V. Derycke, V. Bezugly, H. Yang, G. Cuniberti, X. Le Roux, A. Noury, W. Zhang, N. Izard, E. Duran, C. Alonso-Ramos, E. Cassan, L. Vivien.

Carbon nanotubes for efficient emission at telecom wavelengths on silicon photonic structures.

EMRS Spring Meeting 2015 (European Material Research Society Conference).

Lille (France), Grand Palais, 11 – 15 May 2015.

- 5 **F. Biccari***, G. Fiaschi, F. Sarti, A. Vinattieri, M. Gurioli, S. Birindelli, M. Felici, G. Pettinari, A. Gerardino, R. Trotta, A. Polimeni, M. Capizzi.

Optical characterization of site-controlled quantum dots obtained by hydrogenation of Ga(AsN)/GaAs quantum wells.

EMRS Spring Meeting 2015 (European Material Research Society Conference).

Lille (France), Grand Palais, 11 – 15 May 2015.

- 4 **F. Biccari***, C. Malerba, M. Valentini, R. Chierchia, Mittiga, C. L. Azanza Ricardo, P. Scardi.

Tin concentration effect on CZTS solar cells.

PVTC 2012 (PhotoVoltaic Technical Conference).

Aix-en-Provence (France), Centre de Congrès, 6 – 8 June 2012.

- 3 M. Valentini, C. Malerba, **F. Biccari***, R. Chierchia, P. Mangiapane, E. Salza, A. Mittiga.

Growth and characterization of $\text{Cu}_2\text{ZnSnS}_4$ thin films prepared by sulfurization of evaporated precursors.

EU PVSEC 2011 (European Photovoltaic Solar Energy Conference).

Hamburg (Germany), Messeplatz, 5 – 9 September 2011.

- 2 **F. Biccari***, C. Malerba, A. Mittiga.

Impurity effects in Cu_2O .

EMRS Spring Meeting 2010 (European Material Research Society Conference).

Strasbourg (France), Palais des Congrès et de la Musique, 7 – 11 June 2010.

- 1 **F. Biccari***, C. Malerba, A. Mittiga.

Chlorine doping of Cu_2O .

EMRS Spring Meeting 2009 (European Material Research Society Conference).

Strasbourg (France), Palais des Congrès et de la Musique, 8 – 12 June 2009.

Note: The conference paper has been selected as one of the best and it was awarded

with the publication in the Elsevier journal Solar Energy Materials & Solar Cells (see paper n. 2).