

## Curriculum Vitae:



**Name:** Narges  
**Surname:** Yaghoobi Nia  
**Date of Birth:** 7 May 1985  
**Nationality:** Iranian  
**Gender:** Female  
**Resident:** Italy-Rome  
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### **Bio:**

Narges Yaghoobi Nia holds Ph.D. in Electronics Engineering in 2017. She was awarded in 2014 a MARIE CURIE Fellowship as a part of the EU-funded project (**Destiny FP7/2007–2013**). In 2022, she was awarded a Global MARIE CURIE Fellowship. She is founder of the **PVSPACE** Organisation. She is currently Principal investigator of **P4SPACE** project in Aerospace Engineering School of Sapienza University of Rome, Italy and EPFL University in Lausanne, Switzerland.

She was member, key Person and task leader of **VIPERLAB** project (Fully Connected Virtual and Physical Perovskite Photovoltaic Lab Knowledge Exchange Portal, funded from the European Union's Horizon 2020 research and innovation programme).

She has also the role of Communication Manager in the **NEXTCCUS project** (Next Generation Electrochemical System for Sustainable Direct CO<sub>2</sub> Capture and Utilization/Storage as Clean Solar Fuel) ERA-NET ACT 2021. She is also Scientific responsible of **CHOH – D** project (Italian industrial project for CO<sub>2</sub> reduction) in Italy.

She was an Assistant Professor in the Department of Electronics Engineering, University of Rome Tor Vergata. She has more than 12 years' experience in the fields of emerging thin film PVs (especially perovskite solar cells/modules, tandem solar Module for terrestrial and aerospace applications) and electrochemistry of polymeric layers. She was a member of **ESPRESSO**, **ENEA**, **PRIN** and **PERSEO** projects and collaborator for the **ASI** (Italian Space Agency) projects. She published more than 50 scientific papers in international journals, books and chapters in addition to two patents relevant to perovskite PVs and electrochemical reactors.

She has expertise for organizing the conferences and workshops e.g. **PVSPACE-23**, **PVSPACE-2022** conference and **PEROSPACE-2022** workshop relevant to photovoltaics for space applications.

### **Current and previous positions:**

<b>Date</b>	<b>Title</b>	<b>Institution</b>
01/04/ 2023-31/03/2024	Principle investigator of <b>P4SPACE</b> project (Global Marie Curie fellowship)	EPFL University- Laboratory of Photonics and Interfaces Prof. Micheal Graetzel)
01/04/ 2023-present	Principle investigator of <b>P4SPACE</b> project (Global Marie Curie fellowship)	Sapienza University of Rome - Aerospace Engineering School and EPFL University)
01/02/2022 – 31/03 /2023	<b>RTD-A (Assistant professor)</b> , Department of Electronics Engineering, University of Rome “Tor Vergata”, Italy. MUR PON project cofounded on <b>VIPERLAB</b> project	
2017 – 01/ 2022	<b>Postdoctoral Research Fellow</b> , University of Rome (Tor Vergata), Italy-Electronic Engineering Department, Centre for Hybrid and Organic Solar Energy (C.H.O.S.E)	
2014 – 2017	<b>Marie-Curie Early-Stage Researcher</b> (was awarded in 2014 a Marie-Curie Fellowship part of the EU-funded project DyE SensITized solar cells wIth eNhanced stability (Destiny) (FP7/2007-2013). Department of Electronics Engineering, University of Rome “Tor Vergata”, Italy.	
2014- 2017	<b>PhD of electronic engineering</b> , Department of Electronics Engineering, University of Rome “Tor Vergata”, Italy Supervisor: Prof. Aldo Di Carlo	

### **Prizes, Awards and fellowships**

2023	Incentivazione PI – MSCA-Sapienza Università
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2022	Narges Yaghoobi Nia was awarded in 2022 a global Marie curie Fellowship with total score of: 96.80%, Principal investigator <b>P4SPACE</b> project, (School of Aerospace Engineering, Sapienza University of Rome in Italy and EPFL University in Switzerland)
2014 – 2017	Marie-Curie Early-Stage Researcher (was awarded in 2014 a Marie-Curie Fellowship part of the EU-funded project DyE SensiTized solar cells wLth eNhanced stability ( <b>Destiny</b> ) European Union Seventh Framework Program [FP7/2007- 2013] <b>DESTINY</b> project. Department of Electronics Engineering, University of Rome “Tor Vergata”, Italy.
2013	<b>1st Rank</b> of the university in M. Sc. degree
2017-2019	Fellowship (assegno di ricerca) from university of Rome TorVergata on an ENEA project Accordo di Programma <b>MiSE-ENEA 2015</b>
2019-2020	Fellowship (assegno di ricerca) from university of Rome TorVergata on an ( <b>ESPRESSO</b> ) project
2020-2021	Fellowship (assegno di ricerca) from university of Rome TorVergata on an ENEA project Accordo di Programma <b>MiSE-ENEA 2015</b>

### Research Experiences:

Dates	Title	Institution
01/01/2022 - 31/12/2024	Research Associate	Institute of Structure of Matter ISM - CNR
1/2023	Visiting Assistant Professor	Institute for Materials Discovery, University College London (UCL)
9/2019	Visiting Researcher	École polytechnique fédérale de Lausanne (EPFL), Prof. Grätzel Group, Lausanne, Switzerland
10 -11/2019	Visiting Researcher	Middle East Technical University, Ankara, Turkey
9/2018	Visiting Researcher	University of Groningen, Netherlands
10/ 2016	Visiting Researcher	École polytechnique fédérale de Lausanne (EPFL), Prof. Grätzel Group, Lausanne, Switzerland
2011	Visiting Researcher	Uppsala University, Sweden

### Projects:

Date	Role	Title of project	Institution
2021-2024	Communication manager	Next generation electrochemical system for sustainable direct CO <sub>2</sub> capture and utilization/storage as clean solar fuel ( <b>NEXTCCUS</b> )	“ERA-NET ACT 2021”
2022-2023	Responsabile Scientifico	Caratterizzazione di un reattore per catalisi	University of Rome Tor Vergata
2021-2022	Research team member	<b>CHOH-D</b> Project Industrial CO <sub>2</sub> reduction to methanol	CHOH-D- Italian Project
2021-2023	key person, member and task leader of Task NA2.4: Courses and workshops for training leader Perovskite module development.	Fully connected virtual and physical perovskite photovoltaics lab ( <b>VIPERLAB</b> )	H2020-EU.1.4.1.2.
2020-2021	Researcher	Studio della stabilizzazione di celle a perovskite per applicazioni tandem (Study of the stabilization of perovskite cells for tandem applications)	Italian Ministry of Economic Development in the framework of the Operating Agreement “Accordo di Programma MiSE-ENEA 2015”
2019-2020	Researcher	Efficient structures and processes for reliable perovskite solar modules ( <b>ESPRESSO</b> )	H2020-EU.3.3.2.
2017-2019	Researcher	Studio della stabilizzazione di celle a perovskite per applicazioni tandem (Study of the stabilization of perovskite cells for tandem applications)	Italian Ministry of Economic Development in the framework of the Operating Agreement “Accordo di Programma MiSE-ENEA 2015”

2015-2017	Researcher	Perovskite-based solar cells: towards high efficiency and long-term stability ( <b>PERSEO</b> )	Italian Ministry of University and Scientific Research (MIUR)
2014-2015	Researcher	Cost-reduction through material optimization and Higher energy output of solar photovoltaic modules - joining Europe's Research and Development efforts in support of its PV industry ( <b>CHEETAH</b> )	FP7-ENERGY

#### Teaching and supervision activities:

Date	Title
2022	<p><b>PhD course:</b> Nano Energy, Tor Vergata University (Electronic Engineering Department)</p> <p><b>Master Course:</b> Nano-Energy (2 CFU) all'interno della Laurea Magistrale in Ing. Elettronica, Tor Vergata University</p> <ul style="list-style-type: none"> <li>• Introduction to nano world and clean energy</li> <li>• Photovoltaics from the nanoscale to the macroscale</li> <li>• Piezoelectric, Piezophotonics and triboelectric nanogenerators</li> <li>• Efficient light emission from nano-objects (light-emitting diodes and electrochemical cells)</li> <li>• Policy and perspectives in energy</li> </ul>
	<p>Supervisor: 1master student/2022/2023 Sapienza University/(C.H.O.S.E)</p> <p>Co supervisor: 1master and 1 PhD student Tor Vergata University (2019/2022) (C.H.O.S.E)</p> <p>Mentor: 4 PhD students (2018/2021) and 1 master student 2015 (Sabbatical period ) in University of Rome "Tor Vergata" (C.H.O.S.E)</p> <p>Mentor: 1 PhD student at University of Rome "Tor Vergata" (C.H.O.S.E) 2017</p>

#### Patents:

Date	Title of Invention	Place of Submission
2021	Electrocatalytic method and apparatus for the simultaneous conversion of methane and CO <sub>2</sub> to methanol through an electrochemical reactor operating at ordinary temperatures and pressures, including ambient ones	WIPO WO2021117071A1 US patent APP 17/779,570
2023	M Zendehtdel, N Yaghoobi Nia	
2015	Fabrication of Efficient and Stable Solid-state Perovskite Solar Cells and Panels M Zendehtdel, N Yaghoobi Nia, M Karimi	Iran Patent Office IR 87466

#### Conference and workshop Organizer:

Date	Title
2023	Organizer of the New Generation Photovoltaics for Space ( <b>PVSAPCE 2023</b> ), In person- July 2023 Rome-Sapienza University <a href="https://www.pvspace.org/">https://www.pvspace.org/</a>
2022	Organizer of the <b>PEROSPACE</b> workshop: Perovskite Solar Module Fabrication & Commercialization (Hybrid event: Online and in-person)
2022	Organizer of the <b>PEROSPACE</b> workshop: Space Application of Perovskite Photovoltaics (in-person), Scuola di Ingegneria Aerospaziale- Rome- Sapienza Università 29th November 2022
2022	Organizer of the New Generation Photovoltaics for Space ( <b>PVSAPCE 2022</b> ) Conference , Online, 21st - 22nd June 2022 <a href="https://www.nanoge.org/PVSPACE/home">https://www.nanoge.org/PVSPACE/home</a>
2015	Part of the conference organization team of 15th IEEE-NANO/ Italy.
2021	Scientific advisory board and Session Moderator of SPTech June 2021/ Portugal. <a href="https://solar-power-tech.com/organizers/">https://solar-power-tech.com/organizers/</a>
2021	Co-chair of <b>NEXTCCUS</b> project (ERA-NET ACT 2021) kick-off meeting/ Italy.

#### Books, Chapters:

Date	Title of Book and chapter	Publication
2020	Photovoltaics : A Di Carlo, E Lamanna, N Yaghoobi Nia	EDP Sciences 10.1051/epjconf/202024600005

2020	Environmental Impacts of Solar Panels, Chapter title: Emerging Thin Film Solar Panels: M Zendehtdel, N Yaghoobi Nia, M Yaghoobinia	IntechOpen ISBN: 978-1-78984-823-6
2019	Solar Cells and Light Management: Materials, Strategies and Sustainability. Chapter 5: Perovskite solar cell: N Yaghoobi Nia*, D Saranin, AL Palma, A Di Carlo	ELSEVIER ISBN: 0081027621, 9780081027622

### **Publications:**

***A: Papers: (# equal contribution, \* Corresponding author)***

#	Title of Paper	Place of Publication	Date
1	<b>Barrier layer for space</b> <a href="#">Narges Yaghoobi Nia*</a>	Nature Energy [10.1038/s41560-023-01197-9]	2023
2	<b>The Effect of Electrospinning Parameters on Piezoelectric PVDF-TrFE Nanofibers: Experimental and Simulation Study</b> M Pourbafrani, S Azimi, <a href="#">N Yaghoobi Nia</a> , M Zendehtdel, MM Abolhasani	Energies [10.3390/en16010037]	2022
3	<b>Versatile Electroluminescence Color-Tuning Strategy of an Efficient Light-Emitting Electrochemical Cell (LEC) by an Ionic Additive</b> Soheila Karimi, Hashem Shahroosvand, <a href="#">Narges Yaghoobi Nia</a> , Aldo Di Carlo, Mohammad Khaja Nazeeruddin	Inorganic Chemistry [10.1021/acs.inorgchem.2c02165]	2022
4	<b>Sodium diffuses from glass substrates through P1 lines and passivates defects in perovskite solar modules</b> Felix Utama Kosasih, Francesco Di Giacomo, Jordi Ferrer Orri, Kexue Li, Elizabeth M. Tennyson, Weiwei Li, Fabio Matteocci, Gunnar Kusch, <a href="#">Narges Yaghoobi Nia</a> , Rachel A. Oliver, Judith L. MacManus-Driscoll, Katie L. Moore, Samuel D. Stranks, Aldo Di Carlo, Giorgio Divitini, Caterina Ducati	Energy & Environmental Materials [10.1002/eem2.12459]	2022
5	<b>Solar Energy in Space Applications: Review and Technology Perspectives</b> Rosaria Verduci, Valentino Romano, Giuseppe Brunetti, <a href="#">Narges Yaghoobi Nia</a> , Aldo Di Carlo, Giovanna D'Angelo, Caterina Ciminelli	Advance Energy materials [10.1002/aenm.202200125]	2022
6	<b>Re-evaluation of photoluminescence intensity as an indicator of efficiency perovskite solar cells</b> V Campanari, F Martelli, A Agresti, S Pescetelli, <a href="#">N Yaghoobi Nia</a> , F Di Giacomo, D Catone, P O'Keeffe, S Turchini, B Yang, J Suo, A Hagfeldt, A Di Carlo	Solar RRL [10.1002/solr.202200049]	2022
7	<b>Reducing Losses in Perovskite Large Area Solar Technology: Laser Design Optimization for Highly Efficient Modules and Mini Panels</b> LA Castriotta, M Zendehtdel#, <a href="#">N Yaghoobi Nia</a> #, E Leonardi, M Löffler, B Paci, A Generosi, B Rellinghaus, A Di Carlo	Advanced Energy Materials [10.1002/aenm.202103420]	2022
8	<b>A universal co-solvent dilution strategy enables facile, eco-friendly and cost-effective fabrication of perovskite photovoltaics</b> H Zhang #, K Darabi #, <a href="#">N Yaghoobi Nia</a> #, A Krishna, P Ahlawat, B Guo, MHS Almalki, T-S Su, V Bolnykh, LA Castriotta, D Ren, M Zendehtdel, L Pan, S Sanchez Alonso, R Li, SM Zakeeruddin, A Hagfeldt, U Rothlisberger, A Di Carlo, A Amassian, M Grätzel	Nature Communication [10.1038/s41467-021-27740-4]	2021

9	<b>Neutron irradiated perovskite films and cells on PET substrate</b> F De Rossi, B Taheri, M Bonomo, V Gupta, G Renno, <a href="#">N Yaghoobi Nia</a> , P Rech, C Frost, C Cazzaniga, P Quagliotto, A Di Carlo, C Barolo, M Ottavi, F Brunetti	Nano Energy [10.1016/j.nanoen.2021.106879]	2021
10	<b>Zero-Waste Scalable Blade-Spin Coating as Universal Approach for Layer-By-Layer Deposition of 3D/2D Perovskite Films in High Efficiency Perovskite Solar Modules</b> M Zendehtdel, <a href="#">N Yaghoobi Nia</a> , B Paci, A Generosi, A Di Carlo	Solar RRL [10.1002/solr.202100637]	2021
11	<b>On the scaling of perovskite photovoltaics to modules and panels</b> A Di Carlo, <a href="#">N Yaghoobi Nia</a> , A Agresti, S Pescetelli, F Matteocci, L Vesce, LA Castriotta	IEEE P2292-P2290	2021
12	<b>Beyond 17% stable perovskite solar module via polaron arrangement of tuned polymeric hole transport layer</b> <a href="#">N Yaghoobi Nia*</a> , M Zendehtdel, M Abdi-Jalebi, LA Castriotta, FU Kosasih, E Lamanna, MM Abolhasani, Z Zheng, Z Andaji-Garmaroudi, K Asadi, G Divitini, C Ducati, RH Friend, A Di Carlo	Nano Energy 82, 105685 10.1016/j.nanoen.2020.105685	2021
13	<b>Impact of P3HT Regioregularity and Molecular Weight on the Efficiency and Stability of Perovskite Solar Cells</b> <a href="#">N Yaghoobi Nia</a> , M Bonomo, M Zendehtdel, E Lamanna, MMH Desoky, B Paci, F Zurlo, A Generosi, C Barolo, G Viscardi, P Quagliotto, A Di Carlo	ACS Sustainable Chemistry & Engineering 9, 14, 5061-5073 10.1021/acssuschemeng.0c09015	2021
14	<b>Modified P3HT materials as hole transport layers for flexible perovskite solar cells</b> F De Rossi, G Renno, B Taheri, <a href="#">N Yaghoobi Nia</a> , V Ilieva, A Fin, A Di Carlo, M Bonomo, C Barolo, F Brunetti	Journal of Power Sources 10.1016/j.jpowsour.2021.229735	2021
15	<b>Crystal engineering approach for fabrication of inverted perovskite solar cell in ambient conditions</b> I Ermanova, <a href="#">N Yaghoobi Nia*</a> , E Lamanna, E Di Bartolomeo, E Kolesnikov, L Luchnikov, A Di Carlo	Energies 14, 1751 10.3390/en14061751	2021
16	<b>Fabrication of high efficiency, low-temperature planar perovskite solar cells via scalable double-step crystal engineering deposition method fully out of glove box</b> S Navazani, <a href="#">N Yaghoobi Nia*</a> , M Zendehtdel, A Shokuhfar, A Di Carlo	Solar Energy 206, 181-187 10.1016/j.solener.2020.05.084	2020
17	<b>Analysis of the Efficiency Losses in Hybrid Perovskite/PTAA Solar Cells with Different Molecular Weights: Morphology versus Kinetics</b> <a href="#">N Yaghoobi Nia</a> , M Méndez, B Paci, A Generosi, A Di Carlo, E Palomares	ACS Applied Energy Materials 3, 7, 6853-6859 10.1021/acsaem.0c00956	2020
18	<b>Solution-based heteroepitaxial growth of stable mixed cation/anion hybrid perovskite thin film under ambient condition via a scalable crystal engineering approach</b> <a href="#">N Yaghoobi Nia</a> , F Giordano, M Zendehtdel, L Cinà, AL Palma, PG Medaglia, S M Zakeeruddin, M Grätzel, A Di Carlo	Nano Energy 69, 104441 10.1016/j.nanoen.2019.104441	2020
19	<b>Polymer/Inorganic Hole Transport Layer for Low-Temperature-Processed Perovskite Solar Cells</b> N Irannejad#, <a href="#">N Yaghoobi Nia#</a> , S Adhami, E Lamanna, B Rezaei, A Di Carlo	Energies 13, 2059 10.3390/en13082059	2020
20	<b>The Molecular Weight Dependence of Thermoelectric Properties of Poly (3-Hexylthiophene)</b> S Mardi, M Pea, A Notargiacomo, <a href="#">N Yaghoobi Nia</a> , A Di Carlo, A Reale	Materials 13, 1404 10.3390/ma13061404	2020
21	<b>Doping Strategy for Efficient and Stable Triple Cation Hybrid Perovskite Solar Cells and Module Based on Poly(3-Hexylthiophene) [P3HT] Hole Transport Layer</b>	Small 15, 1904399 10.1002/sml.201904399	2019

	<a href="#">N Yaghoobi Nia*</a> , E Lamanna, M Zendehtdel, A L Palma, F Zurlo, L A Castriotta, A Di Carlo		
22	<b>Energetic disorder in perovskite/polymer solar cells and its relationship with the interfacial carrier losses</b> <a href="#">N Yaghoobi Nia</a> , M Méndez , A di Carlo, E Palomares	Philos. Trans. Royal Soc. A 377, 20180315 10.1098/rsta.2018.0315	2019
23	<b>Perovskite Photo-Detectors (PVSK-PDs) for Visible Light Communication</b> L Salamandra, <a href="#">N Yaghoobi Nia</a> , M Di Natali, C Fazolo, S Maiello, L La Notte, G Susanna, A Pizzoleo, F Matteocci, L Cina, L Mattiello, F Brunetti, A Di Carlo, A Reale	Org. Electron. 69, 220 10.1016/j.orgel.2019.03.008	2019
24	<b>A PdPt decorated SnO<sub>2</sub>-rGO nanohybrid for high-performance resistive sensing of methane</b> S Navazani, A Shokuhfar, M Hassanisadi, A Di Carlo, <a href="#">N Yaghoobi Nia</a> , A Agresti	J. Taiwan. Inst. Chem. E 95, 438 10.1016/j.jtice.2018.08.019	2018
25	<b>Graphene-engineered automated sprayed mesoscopic structure for perovskite device scaling-up</b> B Taher, <a href="#">N Yaghoobi Nia</a> , A Agresti, S Pescetelli, C Ciceroni, AE Del Rio Castillo, L Cina, S Bellani, F Bonaccorso, A Di Carlo	2D Materials 5, 045034 10.1088/2053-1583/aad983	2018
26	<b>A Crystal Engineering Approach for Scalable Perovskite Solar Cells and Modules Fabrication: Full Out of Glove Box Procedure</b> <a href="#">N Yaghoobi Nia</a> , M Zendehtdel, F Matteocci, L Cina, A Di Carlo	J. Mat. Chem. A 6, 659-671 10.1039/C7TA08038G	2018
27	<b>High Efficiency MAPbI<sub>3</sub> Perovskite Solar Cell Using a Pure Thin Film of Polyoxometalate as Scaffold Layer</b> MK Sardashti, M Zendehtdel, <a href="#">N Yaghoobi Nia</a> , D Karimian, M Sheikhi	ChemSusChem [back cover Perovskite Special Issue] 10.1002/cssc.201701764	2017
28	<b>High Efficiency MAPbI<sub>3</sub> Perovskite Solar Cell Using a Pure Thin Film of Polyoxometalate as Scaffold Layer</b> MK Sardashti, M Zendehtdel, <a href="#">N Yaghoobi Nia</a> , D Karimian, M Sheikhi	ChemSusChem 10, 3773-3779 10.1002/cssc.201701027	2017
29	<b>High Efficiency Perovskite Solar Cell Based on Poly (3-hexylthiophene) (P3HT): The Influence of P3HT Molecular Weight and Mesoscopic Scaffold Layer</b> <a href="#">N Yaghoobi Nia</a> , F Matteocci, L Cina, A Di Carlo	ChemSusChem 10, 3854-3860 10.1002/cssc.201700635	2017
30	<b>A Combined Computational and Experimental Study of the Hydrogen Bonding with Chloride Ion in a Crab-claw Like Site of a New Chromium Schiff Base Complex</b> M Zendehtdel, <a href="#">N Yaghoobi Nia</a> , MN Esfahani, P Farahani, MR Karbaschi	Inorg. Chim. Acta 447, 150 10.1016/j.ica.2016.03.040	2016
31	<b>A Combined Computational and Experimental Study of the [Co(bpy)<sub>3</sub>]<sup>2+/3+</sup> Complexes as a One-Electron Outer-Sphere Redox Couple in a Dye-Sensitized Solar Cell Electrolyte Media</b> <a href="#">N Yaghoobi Nia</a> , P Farahani, H Sabzyan, M Zendehtdel and M Oftadeh	Phys. Chem. Chem. Phys. [Advance Article] 16, 11481 10.1039/C3CP55034F	2014
32	<b>Fabrication and characterization of a new dye sensitized solar cell with a new Schiff base cobalt complex as a redox mediator</b> MN Esfahani, M Zendehtdel, <a href="#">N Yaghoobi Nia</a> , B Jafari, M Khosravi Babadi	RSC Adv., 4, 15961 10.1039/C3RA46531D	2014

#### Reports:

Date	Title of report	Place of Publication
2021	<b>Materiali innovativi; Studio e miglioramento della stabilità nelle celle solari a perovskite: struttura ed elettrodi:</b> <a href="#">N Yaghoobi Nia</a> , E Calabrò, LA Castriotta, E Nonni, E Magliano, P Mariani, HR Sathy, M Lucci, C Cornaro, A Di Carlo	ENEA
2021	<b>Perfezionamento della geometria dei moduli e dei processi di laser-patterning:</b> <a href="#">N Yaghoobi Nia</a> , LA Castriotta, L Vesce, A Di Carlo	ENEA

2018	<b>Realizzazione di celle solari a singola giunzione a base di perovskite ibrida organico/inorganico e di celle tandem perovskite/c-Si:</b> E Lamanna, E Calabrò, F Matteocci, <a href="#">N Yaghoobi Nia</a> , AL Palma, A Agresti, S Pescetelli, V La Ferrara, M Tucci, P Delli Veneri, A Di Carlo	ENEA
2017	<b>A 5x5 cm<sup>2</sup> module with an initial active area efficiency of 12% (10% st):</b> F Matteocci, L Vesce, <a href="#">N Yaghoobi Nia</a> , E Calabrò, AL Palma and A Di Carlo	CHEOPS project
2017-2018	<b>Realizzazione di celle tandem Perovskite/Silicio:</b> E Lamanna, E Calabrò, <a href="#">N Yaghoobi Nia</a> , F Matteocci , AL Palma, A Di Carlo	ENEA
2017-2018	<b>Realizzazione Di Cella Base di Perovskita Singola Giunzione:</b> E Calabrò, E Lamanna, <a href="#">N Yaghoobi Nia</a> , F Matteocci, AL Palma, A Agresti, S Pescetelli, A Di Carlo	ENEA

### ***E: Conferences, workshops and Schools***

<b>Title</b>	<b>Present</b>	<b>Name</b>	<b>Date</b>
“Pathway Toward Fabrication of Efficient and Stable Perovskite Solar Modules”	Invited speaker	Carbon Chemistry and Materials	October 2022
"High performance semitransparent perovskite solar cell and modules on flexible and rigid substrate for tandem application"	Invited speaker	4th Moscow Autumn Perovskite Photovoltaic International Conference (MAPPIC-2022).	September 2022
Super Stable Semitransparent Perovskite Solar Modules for 4-terminal Perovskite-Silicon Tandem Modules via Engineering of the Polymeric Hole Transport Layer and Surface Passivation	Oral	14thHOPV	May 2022
Toward Highly Stable and Scalable Perovskite Solar Modules via Co-crystalline 2D Perovskite Passivation and Blade-Spin Deposition‡	Oral	14thHOPV	May 2022
Synthesis and characterization of different type of Polymers as a potential HTM for Perovskite solar cell‡	Poster	HOPV19	2022
Halide perovskite modules and panels‡	Oral	Proceedings of nanoGe Spring Meeting 2022 (NSM22)	Spain, 2022 March 7th - 11th
Laser design optimization route towards highly efficient modules: how to detect and minimize losses‡	Oral	HOPE - PV 2021	November 2021
High performance PSCs by using polymeric layers	Lecture	Summer school of polymer, Amirkabir university of technology (Tehran polytechnic)	September 2021
On the scaling of perovskite photovoltaics to modules and panels‡	Oral	2021 IEEE 48th PVSC	September 2021
Fabrication of high efficacy perovskite solar Module	Lecture	Esfahan and Kashan University	August 2021
Modified P3HT Materials as Hole Transport Layers for Flexible Perovskite Solar Cells‡	Oral	ICAE2021	November 2021
High Efficiency High Stable Large Area Perovskite Solar Module Including 2D Strategy and Polymeric Hole Transport Material	Oral	13th Conference HOPV	May 2021
Sodium Diffusion from P1 Lines Passivates Perovskite Solar Modules‡	Oral	13th Conference HOPV	May 2021
Modified P3HT materials as hole transport layers for flexible perovskite solar cells‡	Oral	13th Conference HOPV	May 2021

Boosting Efficiency and Thermal stability of Large Area Perovskite Solar Modules Beyond 16.5%: The case of Polymeric and Small Molecule Hole Transport Layer	Oral	NIPHO	February 2020
Charge recombination dynamics in Perovskite based devices: a guide to correlate steady-state and dynamic measurements‡	Oral	EnerChem-2	February 2020
Perovskite solar modules: a path to record-breaking devices‡	Oral	35th EU PV Solar Energy Conference and Exhibition	September 2018
A Scalable Crystal Engineering Method for Fabrication of High Efficiency and Stable Planar-structure Multi Cation/Anion Perovskite Solar Cells and Modules Via Sequential Deposition in Ambient Condition	Oral	PSCO 2018, Lausanne, Switzerland	September 2018
A Scalable Crystal Engineering Approach for Fabrication of Efficient and Stable Multi Cation/Anion Perovskite Solar Cells and Modules Via Sequential Deposition in Ambient Condition	Poster	HOPV, Benidorm, Spain	May 2018
A Crystal Engineering Approach for Scalable Perovskite Solar Cells and Modules Fabrication	Oral	Solid State Ionics (SSI), Padua, Italy	June 2017
A Crystal Engineering approach for scalable Perovskite Solar Cells Fabrication: Full Out of Glove Box Procedure	Oral and Poster	PSCO 2016, Genoa, Italy	September 2016
Dopant Effect in PbI <sub>2</sub> Layer Deposition for Enhancement the Photovoltaic Performance of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> -based Perovskite Solar Cells	Oral	EMRS 2016, Lille, France	May 2016
Towards Enhancing Stability of Perovskite Solar Cells‡	Poster	HOPV, Rome, Italy	May 2015
Perovskite and a-Si:H/c-Si tandem solar cell‡	Poster	PVSC, IEEE, New Orleans, USA	June 2015
Anodized aluminum on transparent substrates as scaffold for perovskite growth‡	Poster	15thIEEE-NANO	July 2015
Enhancement of the Perovskite Solar Cell Performance by Crystal Engineering Process	Poster	PSCO, Lausanne, Switzerland	September 2015
International School on Hybrid and Organic Photovoltaics - 9th edition	School	ISOPHOS, Tuscany, Italy	September 2015
Anodized aluminium on transparent substrates as scaffold for perovskite growth‡	Poster	IEEENANO, Rome, Italy	July 2015
High Efficiency Solid State Perovskite Solar Cell Based on Poly (3-hexylthiophene) (P3HT) as HTM with Evaluation of Molecular Weight Values on Stability and Photovoltaic Parameters	Poster	HOPV15, Rome, Italy	May 2015
DESTINY project	Oral	Annual meeting 2, Oxford, UK	January 2015
Effect of P3HT molecular weight on stability and photoelectrochemical parameters of solid-state perovskite solar cell	Poster	Photovoltaics: new frontiers and applications, Lecce, Italy	October 2014
Experimental and Computational Study of the Optical Electron Transfer in D5 and D35 Dye-Sensitized Solar Cells Based on Cobalt Redox System	Poster	20th IACC, Isfahan, Iran	May 2014
Fabrication of efficient dye sensitized solar cells with new cobalt redox system: synthesis, characterization and DFT calculation of electron transfer process	Oral	NSSC91, Tehran, Iran	October 2012
Fabrication and characterization of thin film Titania as a blocking under layer in organic dye sensitized solar cells with cobalt and ferrocene mediators base by sol-gel method‡	Poster	HOPV12, Uppsala, Sweden	May 2012

‡ : contribution as co-author



**Membership to Scientific Associations / Journals:**

Start Year	Role	Institution/Association/ Journal	Position Held
2013	Member	Iran Nanotechnology Initiative Council	Iran
2020	Reviewer	ACS Appl. Energy Mater.	US
2021	Reviewer	ACS Applied Materials & Interfaces	US
2021	Reviewer	Materials letters	Netherlands
2020	Reviewer	Journal of Optics	UK
2021	Guest Editor	Crystals; Special Issue: Advanced Hybrid and Composite Crystals for Solar Fuels	Switzerland
2021	Guest Editor	Crystals; Special Issue: Advance in Application of Perovskite Materials in Optoelectronic Devices	Switzerland
July 1st 2023	Editorial Board Communications Engineering Nature Portfolio	Communications Engineering Nature Portfolio	UK
2022	Guest Editor	Materials ; Special Issue: Perovskite Semiconductors: From Material to Applications	Switzerland
2023	Guest Editor	joint Focus Issue between JPhys Energy and JPhys Photonics (IOP Publishing) Focus Issue on Perovskites for Space Applications	UK

**Language Proficiency:**

Language	Degree of Proficiency											
	Writing				Reading				Speaking			
	Native	Good	Fair	Poor	Native	Good	Fair	Poor	Native	Good	Fair	Poor
Farsi	*				*				*			
English		*				*				*		
Italian		*				*				*		