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LIST OF PUBLICATIONS:

Update : 06/2025

In peer-reviewed international journals:

[RICL1]	**S. VEDRAINE**, Ph. TORCHIO, D. DUCHé, F. FLORY, J.J. SIMON, J. Le ROUZO, and L. ESCOUBAS "*Intrinsic Absorption of Plasmonic Structures for Organic Solar Cells*", Solar Energy Materials and Solar Cells, volume 95, supplement 1 (2011) S57-S64
[RICL2]	D. DUCHé, E. DROUARD, J.J. SIMON, L. ESCOUBAS, Ph. TORCHIO, J. Le ROUZO, and **S. VEDRAINE** "*Light harvesting in organic solar cells*", Solar Energy Materials and Solar Cells, volume 95, supplement 1 (2011) S18-S25.
[RICL3]	F. FLORY, Y.J. CHEN, C.C. LEE, L. ESCOUBAS, J.J. SIMON, P. TORCHIO, J. Le ROUZO, **S. VEDRAINE**, H. DERBAL-HABAK, J. ACKERMANN, I. SHUPYK and Y. DIDANE "*Optical Properties of Dielectric Thin Films Including Quantum Dots*", Applied Optics, volume 50, issue 9 (2011) C129-C134.
[RICL4]	L. ESCOUBAS, J.J. SIMON, Ph. TORCHIO, D. DUCHé, **S. VEDRAINE**, W. VERVISCH, J. Le ROUZO, F. FLORY, G. RIVIèRE, G. YEABIYO and H. DERBAL "*Bringing some photonic structures for solar cells to the fore*", Applied Optics, volume 50, issue 9 (2011) C329-C339.
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[RICL8]	D.-T. NGUYEN, **S. VEDRAINE**, L. CATTIN, P. TORCHIO, M. MORSLI, F. FLORY and J.C. BERNEDE "*Effect of the thickness of the MoO3 layers on optical properties of MoO3/Ag/MoO3 multilayer structures*", Journal of Applied Physics, Volume 112 (September 2012) 063505.

[RICL9]	A. SYTCHKOVA, M.L. GRILLI, A. RINALDI, **S. VEDRAINE**, P. TORCHIO, A. PIEGARI and F. FLORY "*R.F. sputtered Al:ZnO-Ag transparent conductor: a plasmonic nanostructure with enhanced optical and electrical properties*", Journal of Applied Physics, Volume 114 (September 2013) 094509.
[RICL10]	A. SANGAR, A.MERLEN, P. TORCHIO, **S. VEDRAINE**, F. FLORY, L. ESCOUBAS, L. PATRONE, G. DELAFOSSE, V. CHEVALLIER, E. MOYEN and M. HANBUCKEN "*Fabrication and characterization of large metallic nanodots arrays for organic thin film solar cells using anodic aluminum oxide templates*", Solar Energy Materials and Solar Cells, Volume 117 (Ocotber 2013) 657-662.
[RICL11]	H.-J. LIN, **S. VEDRAINE**, J. LE ROUZO, S.-H. CHEN, F. FLORY and C.-C. LEE " *Optical properties of quantum dots layers: Application to photovoltaic solar cells*", Solar Energy Materials and Solar Cells, Volume 117 (October 2013) 652-656.
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[RICL16]	A. BOU, Ph. TORCHIO, **S. VEDRAINE**, D. BARAKEL, B. LUCAS, J.-C. BERNEDE, P.-Y. THOULON, M. RICCI "*Numerical optimization of multilayer electrodes without indium for use in organic solar cells*", Solar Energy Materials and Solar Cells, Volume 125 (June 2014) 310-317.
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[RICL21]	P. M. GEFFROY, **S. VEDRAINE**, F. DUMAS-BOUCHIAT, S. K. SAHA, A. GHENO, F. ROSSIGNOL, P. MARCHET, R. ANTONY, J. BOUCLE and B. RATIER " *Electrical and optical properties of La1-xAxFe1-yByO3-δ perovskite films (with A= Sr and Ca, and B= Co, Ga, Ti) : towards efficient interlayers for optoelectronic applications*", The Journal of Physical Chemistry C, Colume 120 (Dec 2016), 28583-28590 (10.1021/acs.jpcc.6b09083)
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[RICL26]	K. N'KONOU, M. CHALH, V. MONNIER, N. P. BLANCHARD, Y. CHEVOLOT, B. LUCAS, **S. VEDRAINE**, P. TORCHIO " *Impact of Ag@SiO2 core-shell nanoparticles on the photoelectric current of plasmonic inverted organic solar cells*", Synthetic Metals, Volume 239 (2018), 22-28 (DOI 10.1016/j.synthmet.2018.03.003)
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[RICL28]	A. PERRAUDEAU, C. DUBLANCHE-TIXIER, P. TRISTANT, C. CHAZELAS, **S. VEDRAINE** and B. RATIER " *Low-temperature deposition of TiO2 by atmospheric pressure PECVD towards photoanode elaboration for perovskite and solid-state dye-sensitized solar cells*", EPJ Photovoltaics, Volume 10 (2019), 5 (DOI 10.1051/epjpv/2019006)
[RICL29]	F. AL-ZOHBI, Y. JOUANE, S. BENHATTAB, J. FAURE-VINCENT, F. TRAN-VAN, **S. VEDRAINE**, J. BOUCLE, N. BERTON and B. CHMALTZ " *Simple carbazole-based hole transporting materials with fused benzene ring substituents for efficient perovskite solar cells*", New Journal of Chemistry, Volume 43 (2019), 12211-12214 (DOI 10.1039/C9NJ03089A)
[RICL30]	K. N'KONOU, M. CHALH, B. LUCAS, **S. VEDRAINE**, P. TORCHIO " *Impact of Ag@SiO2 core-shell nanoparticles on the photoelectric current of plasmonic inverted organic solar cells*", Polymer International, Volume 68 (2019), 979-983 (DOI 10.1002/pi.5789)
[RICL31]	R. BELCHI, A. HABERT, E. FOY, A. GHENO, **S. VEDRAINE**, R. ANTONY, B. RATIER, J. BOUCLE, and N. HERLIN-BOIME " *One-Step Synthesis of TiO2/Graphene Nanocomposites by Laser Pyrolysis with Well-Controlled Properties and Application in Perovskite Solar Cells*", ACS Omega, Volume 4 (2019), 11906-11913 (DOI 10.1021/acsomega.9b01352)
[RICL32]	F. BEFFARA, J. PERUMAL, A. P. MAHYUDDIN, M. CHOOLANI, S. A. KHAN, J. L. AUGUSTE, **S. VEDRAINE**, G. HUMBERT, U. S. DINISH and M. OLIVO *" Development of Highly Reliable SERS-active Photonic Crystal Fiber Probe and its Application in the Detection of Ovarian Cancer Biomarker in Cyst Fluid*", Journal of Biophotonics, Volume 13 (2020), e201960120 (DOI 10.1002/jbio.201960120)
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[RICL34]	S. KARTHICK, H. HAWASHIN, N. PAROU, **S. VEDRAINE**, S. VELUMANI and J. BOUCLE "*Copper and Bismuth incorporated mixed cation perovskite solar cells by one-step solution process* ", Solar Energy, Volume 218 (2021), 226-236 (DOI 10.3390/nano10071289)
[RICL35]	I. BERCEA, C. CHAMPEAUX, A. BOULLE, C. D. CONSTANTINESCU, J. CORNETTE, M. COLAS, **S. VEDRAINE** and F. DUMAS-BOUCHIAT " *Adaptive gold/vanadium dioxide periodic arrays for infrared optical modulation* ", Applied Surface Science, Volume 585 (2022), 152592 (DOI 10.1016/j.apsusc.2022.152592)
[RICL36]	E. BRENIAUX, P. DUFOUR, S. KARTHICK, C. YILDIRIM, **S. VEDRAINE**, N. RATEL-RAMOND and C. TENAILLEAU " *Perovskite $CsPbI_2Br$ thin films prepared under nitrogen flow and black phase stabilization in the presence of a two-dimensional inorganic halide material and indium* ", European Journal of Inorganic Chemistry, Volume 34 (2022), e202200490 (DOI 10.1002/ejic.202200490)

[RICL37]	C. YILDIRIM, F. DEVOIZE, P.-M. GEFFROY, F. DUMAS-BOUCHIAT, J. BOUCLE and **S. VEDRAINE** " Electrical and optical properties of $CaTi_{1-y}Fe_yO_{3-\delta}$ perovskite films as interlayers for Optoelectronic applications ", Materials, Volume 15 (2022), 6533 (DOI 10.3390/ma15196533)
[RICL38]	I. IBRAHIM ZAMKOYE, J. BOUCLE, N. LECLERC, B. LUCAS and **S. VEDRAINE** " Silver Nanowire Electrodes Integrated in Organic Solar Cells with Thick Active Layer Based on a Low-Cost Donor Polymer ", Solar RRL, Volume 7 (2023), 2200756 (DOI 10.3390/ma15196533)
[RICL39]	R. S. IBRAHIM, TALAAT A. HAMEED and **S. VEDRAINE** " AgSbTe2 semi-nanocrystalline thin films as a multifunctional platform for optoelectronic and diode applications", Ceramics International, 49(19), 30972-30988 (2023) (DOI 10.1016/j.ceramint.2023.06.270)
[RICL40]	I. IBRAHIM ZAMKOYE, B. LUCAS and **S. VEDRAINE** "Synergistic Effects of Localized Surface Plasmon Resonance, Surface Plasmon Polariton, and Waveguide Plasmonic Resonance on the Same Material: A Promising Hypothesis to Enhance Organic Solar Cell Efficiency", Nanomaterials, Volume 13(15), 2209 (2023), (DOI 10.3390/nano13152209)
[RICL41]	F. M. H. AL SULAMI, M. M. ALSABBAN, A. I. AL-SULAMI, M FARRAG, **S. VEDRAINE**, K.-W. HUANG, E. SHEHA, TALAAT A. HAMEED *"*Nano-synthesis and Characterization of Cu1.8Se0.6S0.4 as a Potential Cathode for Magnesium battery applications *"*, Langmuir, Volume 39(37), 13038-13049 (2023) (DOI 10.1021/acs.langmuir.3c01265)
[RICL42]	B. MOEGLEN PAGET, K. VINOD RAM, S. ZHANG, J. PERUMAL, **S. VEDRAINE**, G. HUMBERT, M. OLIVO and U. S. DINISH "A review on photonic crystal fiber based fluorescence sensing for chemical and biomedical applications", Sensors and Actuators B: Chemical, Volume 400 (B), 134828 (2024), (DOI 10.1016/j.snb.2023.134828)
[RICL43]	S. AZZAZ, C. YILDIRIM, **S. VEDRAINE**, J. BOUCLE, and A. BOUAZIZI " Graphene oxide-incorporated mixed cation FA-Cs perovskite layer for better efficiency solar cells", Journal of Materials Science: Materials in Electronics, Volume 36, 1-13 (2025), (DOI 10.1007/s10854-025-14689-z)
[RICL44]	B. MOEGLEN PAGET, J. PERUMAL, **S. VEDRAINE**, G. HUMBERT, M. OLIVO and U. S. DINISH "Plasmonic-enhanced fluorescence measurements within an optofluidic photonic crystal fiber ", APL Photonics, Volume 10 (5), 056113 (2025), (DOI 10.1063/5.0259030)
[RICL45]	C. YILDIRIM, Q.-H. DO, P.-M. GEFFROY, F. DUMAS-BOUCHIAT, J. BOUCLE and **S. VEDRAINE** "Enhancing the durability of PeLEDs via SrTi0. 7Fe0. 3O3-δ type perovskite oxide interlayer", Materials Science in Semiconductor Processing, Volume 36, 1-13 (2025), (DOI 10.1016/j.mssp.2025.109641)
[RICL46]	KAILASH, A. AKOUIBAA, R. MARSOUR, A. AKOUIBAA, A. BHARDWAJ, P. ASIF, S.S. VERMA, **S. VEDRAINE** and H. HERYANTO "Plasmonic heating and optical response of Au nanorods and spheroids in the NIR window for photothermal applications", International Journal of Thermal Sciences, Volume 215, 110021 (2025), (DOI

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In the form of conference proceedings:

[PROC1]	S. MARTINIE, **S. VEDRAINE**, D. MUNTEANU. G. LE CARVAL, V. BARRAL and J.L. AUTRAN "*Numerical simulation of quasi-ballistic transport in fully-depleted SOI and double-gate MOSFETs: application to the analysis of circuit performances*", Proceedings of the 38th European Solid State Device Research Conference (ESSDERC'2008), Edinburg, Ecosse, September 15-19 (2008).
[PROC2]	L. ESCOUBAS, J.J. SIMON, Ph. TORCHIO, D. DUCHE, **S. VEDRAINE**, W. VERVISCH, J. LE ROUZO, F. FLORY, G. RIVIERE, G. YEABIYO, and H. DERBAL "*State of the Art of Photonic Structures for Solar Cells*", Proceedings of the International Conference on "Optical Interference Coatings", OSA Technical Digest (Optical Society of America), Paper MC1 (2010).
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[PROC6]	**S. VEDRAINE**, V. GERNIGON, P. TORCHIO, F. FLORY, T. HEISER, P. LEVEQUE, and L. ESCOUBAS " *Surface Plasmon Effect on Metallic Nanoparticles Integrated in Organic Solar Cells*", S.P.I.E. Proceedings of the International Conference on Optical Complex Systems (OSC'11), Vol. 8172, pp. 81720G (2011).
[PROC7]	A. SYTCHKOVA, M. L. GRILLI, A. RINALDI, A. M. PIEGARI, **S. VEDRAINE**, P. TORCHIO, F. FLORY "*Surface plasmons for performance enhancement of RF sputtered silver-AZO transparent electrodes*", Proceedings of the International Conference on "Optical Interference Coatings", OSA Technical Digest (Optical Society of America), Paper MA.7, June 16-21 (2013).
[PROC8]	Y. HUANG, S. AHARON, A. GHENO, **S. VEDRAINE**, L. PEDESSEAU, J. P. BURIN, O. DURAND, J. BOUCLE, L. ETGAR, J. EVEN, A. ROLLAND " *Numerical simulation of HTM-free and WOx based perovskite cells: Effects of interface conditions*", Proceedings of the International Conference on Numerical Simulation of Optoelectronic Devices, NUSOD, Volume 2017-August-11, Pages 29 (2017).
[PROC9]	Y. HUANG, A. GHENO, **S. VEDRAINE**, L. PEDESSEAU, J. BOUCLE, J. EVEN, A. ROLLAND, J. B. PUEL, M. GUEUNIER-FARRET " *Transient simulation of halide perovskite-based solar cells with mobile ions and carriers*", Proceedings of the International Conference on Numerical Simulation of Optoelectronic Devices, NUSOD, Volume 2018-November, Pages 135 - 136 (2018).
[PROC10]	S. ZEN, G. LIANG, A. GHENO, **S. VEDRAINE**, N. YU "*2D Perovskite-Based Metasurfaces for Enhanced Plasmonic Sensing*", 2019 Conference on Lasers and Electro-Optics, CLEO 2019 - Proceedings, Optics InfoBase Conference Papers, 2019, Part F128-CLEO_QELS 2019, 8750129 (2019).