

CURRICULUM VITAE

Personal Details

Name: Rafi Shikler

Date and place of birth: 30/9/1968 Tel-Aviv

Department: ECE +972-8-6472567

Personal contact: Livnit 2, Lehadim, +972-8-6513686, +972-52-4040625

Education

B.Sc. - 1991-1994 – Tel-Aviv University – Physics, Magna Cum Laude.

B.Sc. - 1991-1994 – Tel-Aviv University – Mathematics, Magna Cum Laude.

M.Sc. - 1994-1997 – Weizmann institute of science - Physics

Advisor: Prof. Moti Heiblum

Title: Spatial correlation of ionized donors and its effect on scattering time and spin splitting in 2DEG

Ph.D. - 1997-2002 – Tel-Aviv University – Electrical Engineering-Physical electronics

Advisor: Prof. Yossi Rosenwaks

Title: Nanoscale Electrical Characterization of Semiconductors Using Kelvin Probe Force Microscopy

Employment History

2017 -	Tenure associate professor, department of Electrical and Computer Engineering, Ben-Gurion University of the Negev
2014 -2017	Tenure Senior lecturer, department of Electrical and Computer Engineering, Ben-Gurion University of the Negev
2010-2014	Koshland chair for advanced studies in electrical engineering
4/2008-2014	Senior lecturer, department of Electrical and Computer Engineering, Ben-Gurion University of the Negev
1-4/2008	Lecturer, department of Electrical and Computer Engineering, Ben-Gurion University of the Negev
2004-2007	Research associate, OE group, Cavendish Laboratory, University of Cambridge
2003, 2005	Tutoring of VLSI design, the Computer Lab (department of Computer Science & Technology), University of Cambridge
2002-2004	Marie Curie fellow, OE group, Cavendish Laboratory, University of Cambridge
2002	Teaching, Dept. of Electronic Engineering – Physical Electronics, Tel-Aviv University. Course: “Solid State Devices”
1997-2002	Teaching Assistant, Dept. of Electrical Engineering - Physical Electronics, Tel-Aviv University. (Courses: “Solid State Electronic Devices”, “Physical Electronics”)
1994	Teaching Assistant, Dept. Mathematics – Tel Aviv University

Professional Activities(a) Positions in academic administration.

- Deputy head for teaching of the ECE school
- Deputy head of the ECE department
- Head of the micro, nano and VLSI track.
- Member of the study plans committee of the ECE department.
- The contact person to the department of Physics.
- Member of the engineering faculty teaching committee.
- Academic supervisor of the “Introduction to electrical engineering” laboratory
- Academic supervisor of the “Analog electronic” laboratory
- Academic supervisor of the “Advanced analog electronic” laboratory
- Member of the technical and teaching laboratories steering committee

(b) Professional functions outside universities/institutions

- Session head NanoIsrael 2021
- Guest editor (Energies MDPI) “Special issue on organic photovoltaic”.
- Member in ISF, BSF, ISF-CHINA, ISF-INDIA and ministry of science committees.

(c) Membership in professional/scientific societies

- 2009- Member of IEEE
2014- Member of ACS
2008- Member Materials Research Society.
2018 – Member American Physical Society

Awards, Citations, Honors, Fellowships

1991	Exact sciences faculty TAU, Faculty Merit.
1993	Exact sciences faculty TAU, Faculty Merit.
1997	David Kiro excellency award for
1998	Israel Vacuum Society for best poster presentation on “Nanometer-Scale Imaging of Potential Profiles in Semiconductors Junctions”.
2000	Landau foundation award for Ph.D. students in experimental studies 40 k NIS.
2002	The American Vacuum Society Welch award 15k\$.
2010 –2014	Koshland chair for advanced studies in electrical engineering.

Fellowships

1997-2000	Ministry of science, Eshkol Fellowship, for Ph.D. students.
2001	Tel-Aviv nanocenter fellowship for Ph.D. students 60k NIS.
2002-2004	The European union Marie Curie fellowship as part of FP5 program for postdoc studies, title: correlating morphology work function and device performance in polymer blend devices. 65 k GBP
2002	Rotchild scholarship for postdoc studies, 40k\$

Refereed Articles and Letters in Scientific Journals

h-index 21 (GS 22). Total ISI 1425(GS 1823). Without self-citations ISI 1325

1. **R. Shikler^S**, M. Heiblum^{PI}, and V. Umansky^T, "Spatial correlation of ionized donors and its effect on scattering time and spin splitting in a two-dimensional electron gas", *Phys. Rev. B*, **55**, 15427-15430 (1997). IF 2.88 Q1 4/45 (ISI 11 GS 13)
2. **R. Shikler^S**, T. Meoded^S, N. Fried^S, and Y. Rosenwaks^{PI}, "Potential Imaging of Operating Light Emitting Devices using Kelvin Force Microscopy", *Appl. Phys. Lett.*, **74**, 2972-2974 (1999). IF 4.184 Q1 3/67 (ISI 67 GS 105)
3. **R. Shikler^S**, T. Meoded^S, N. Fried^S, B. Mishori^S and Y. Rosenwaks^{PI}, "Two Dimensional Surface Band Structure of Operating Semiconductor Devices", *J. Appl. Phys.* **86**, 107-113 (1999). IF 2.101 Q2 47/145 (ISI 38 GS 59)
4. T. Meoded^S, **R. Shikler^S**, N. Fried^S, and Y. Rosenwaks^{PI}, "Direct Measurement of Minority Carrier Diffusion Length using Atomic Force Microscopy", *Appl. Phys. Lett.*, **75**, 2435-2437 (1999). IF 3.142 Q1 28/145 (ISI 42 GS 60)
5. **R. Shikler^S**, T. Meoded,^S N. Fried^S, N. Ashkenazy^S, and Y. Rosenwaks^{PI}, "Novel application of Kelvin force microscopy", *J. Elec. Mater.* **28**, 1024 (1999). IF 1.49 Q2 109/257 (ISI 0 GS 0)
6. **R. Shikler^S**, T. Meoded^S, N. Fried^S, and Y. Rosenwaks^{PI}, "Measuring Minority-Carrier Diffusion Length using a Kelvin Probe Force Microscope", *Phys. Rev. B*, **61**, 11041-11046, (2000). IF 3.718 Q1 16/67 (ISI 40 GS 56)
7. **R. Shikler^S**, and Y. Rosenwaks^{PI}, "Kelvin Probe Force Microscopy Using Near-field Optical Force Sensors", *Appl. Surf. Sci.*, **157**, 256-262 (2000). IF 3.15 Q2 49/144 (ISI 4 GS 5)
8. **R. Shikler^S**, and Y. Rosenwaks^{PI}, "Near-Field Surface Photovoltage", *Appl. Phys. Lett.*, **77**, 836-839, (2000). IF 3.142 Q1 28/145 (ISI 1 GS 3)
9. S. Saraf^S, **R. Shikler^S**, and Y. Rosenwaks^{PI}, "Microscopic Surface Photovoltage Spectroscopy.", *Appl. Phys. Lett.*, **80**, 2586 (2002) . IF 3.142 Q1 28/145 (ISI 10 GS 17)
10. M. Lesnykh^S, M. Molotski^S, P. Urenski^S, **R. Shikler^S**, G. Rosenman^{PI}, and Y. Rosenwaks^{PI}, "Scanning Probe Microscopy of Well-Defined Ferroelectric Domain Structure." *Appl. Phys. Lett.*, **80**, 1806 (2002). IF 3.142 Q1 28/145 (ISI 17 GS 28)
11. G. Lubarsky^S, **R. Shikler^S**, N. Ashkenasy^S, and Y. Rosenwaks^{PI}, "Quantitative evaluation of local charge trapping in dielectric stacked gate structures using Kelvin probe force microscopy" *J. Vacuum. Sci. Technol. B.*, **20** 1914 (2002). IF 1.2398 Q2 116/257 (ISI 16 GS 22)
12. S. Sadewasser^{PD}, T. Glatzel^S, **R. Shikler^S**, Y. Rosenwaks^{PI}, M.C. Lux-Steiner^{PI}, "Resolution of Kelvin probe force microscopy in ultrahigh vacuum: comparison of experiment and simulation", *Appl. Surf. Sci.*, **210** , 32 (2003). IF 3.15 Q2 49/144 (ISI 58 GS 95)
13. T. Glatzel^S, S. Sadewasser^{PD}, **R. Shikler^S**, Y. Rosenwaks^{PI}, M.C. Lux-Steiner^{PI}, "Kelvin probe force microscopy on III-V semiconductors: the effect of surface defects on the local work function", *Mater. Sci. & Eng. B.*, **B102**, 138 (2003). IF 2.331 Q2 79/271 (ISI 56 GS 87)
14. N. Duhayon^S, P. Eyber^S, M. Fouchier^S, T. Clarysee, ^S, W. Vandervorst^{PI}, D. Alvarez^S, S. Schoemann^S, M. Ciappa^{PI}, M. Stangoni^S, W. Fichtner^S, P. Formanek^S,

- M. Kittler^S, V. Raineri^{PI}, F. Giannazzo^S, D. Goghero^S, Y. Rosenwaks^{PI}, **R. Shikler^S**, S. Saraf^S, S. Sadewasser^{PD}, N. Barreau^S, T. Glatzel^S, M. Verheijen^S, S. A. Mentink^S, M. von Sprekelsen^S, T. Maltezopoulos^S, R. Wiesendanger^{PI}, L. Hellemans^{PI}, "Assessing the performance of two-dimensional dopant profiling techniques.", *J. Vacuum. Sci. Technol. B.*, **22**, 385 (2004). IF 1.2398 Q2 116/257 (ISI 55 GS 72)
15. Y. Rosenwaks^{PI}, **R. Shikler^S**, T. Glatzel^S, S. Sadewasser^{PD}, "Kelvin probe force microscopy of semiconductor surface defects", *Phys. Rev. B.*, **70**, 85320 (2004). IF 3.718 Q1 16/67 (ISI 146 GS 217)
16. M. Chiesa^S, L. Bürgi^{PD}, Ji-S. Kim^{PD}, **R. Shikler^{PD}**, R. H. Friend^{PI}, and H. Sirringhaus^{PI}, "Correlation between Surface Photovoltage and Blend Morphology in Polyfluorene-Based Photodiodes", *Nano Lett.* **4**, 559 (2005). IF 13.779 Q1 7/163 (ISI 156 GS 191)
17. **R. Shikler^{PD}**, M. Chiesa^S, and R. H. Friend^{PI}, "Photovoltaic Performance and Morphology of Polyfluorene Blends: the influence of phase separation evolution", *Macromolecules*, **39**, 5393 (2006). IF 5.554 Q1 7/85 (ISI 37 GS 53)
18. **R. Shikler^{PD}** and R. H. Friend^{PI}, "Absorption Enhancement in Polymer Photocells using Periodic structures", *J. Appl. Phys.* **102**, 013105 (2007). IF 2.101 Q2 47/145 (ISI 6 GS 8)
19. M. Korzov^S, **R. Shikler^{PI}** and D. Andelman^{PI} "Dreaming in Plastic", Physics World, 29 (2008). IF 0.228 Q4 78/79 (ISI 0 GS 2)
20. **R. Shikler^{PI}** and Y. Rosenwaks^{PI} "Response to "Comment on 'Direct measurement of minority carriers diffusion length using Kelvin probe force microscopy' " *Appl. Phys. Lett.* **96**, 216102 (2010). IF 3.142 Q1 28/145 (ISI 0 GS 0)
21. S. Linde^S, A. Carella^{PD} and **R. Shikler^{PI}** "New Approach for Analyzing the Vertical Structure of Polymer Thin Films Based on Surface-Enhanced Raman Scattering" *Macromolecules* **45**, 1476 (2012). IF 5.554 Q1 7/85 (ISI 4 GS 7)
22. A. Carella^{PI}, F. Borbonea^{PI}, A. Rovielloa^S, G. Roviell^S, A. Tuzia^{PI}, A. Kravinsky^S, **R. Shikler^{PI}**, G. Cantelee^S, D. Ninno^{PI} "Benzodifuroxazinones, a new class of heteroacene molecules for possible applications in organic electronics: Synthesis, electronic properties and crystal structure" *Dyes and Pigm.* **95** 116 (2012). IF 4.055 Q1 6/72 (ISI 21 GS 22)
23. S. Mavila^{PD}, C. E. Diesendruck^S, S. Linde^S, Liron Amir^S, **R. Shikler^{PI}**, N. G. Lemcoff^{PI} " Polycyclooctadiene Complexes of Rhodium(I): Direct Access to Organometallic Nanoparticles", *Angewandte Chemie.* **52** 1 (2013). IF 11.709 Q1 11/163 (ISI 65 GS 91)
24. M. Rumbak^S, I. Visloy-Fisher^{PI}, **R. Shikler^{PI}** "Broadband absorption enhancement via light trapping in periodically patterned polymeric solar cells", *J. Appl. Phys.* **114** 013102 (2013). IF 2.101 Q2 47/145 (ISI 8 GS 13)
25. S. Linde^S and **R. Shikler^{PI}** "Comprehensive study of the influence of different environments on degradation processes in F8BT: Correlating optoelectronic properties with Raman measurements", *J. Appl. Phys.* **114** 0164506 (2013). IF 2.101 Q2 47/145 (ISI 2 GS 4)
26. F. Borbone^{PD}, U. Caruso^{PI}, M. Causà^S, S. Fusco^{PD}, B. Panunzi^{PI}, A. Roviello^{PI}, **R. Shikler^{PI}**, A. Tuzi^{PI}, "Series of O,N,O-tridentate ligands zinc(II) complexes with high solid state PL quantum yield" *Eur. J. of Inorganic Chem.* **16** 2695-2703 (2014). IF 2.686 Q2 12/46 (ISI 21 GS 12)

27. M. Argeri^{PD}, F. Borbone^{PD}, U. Caruso^{PI} M. Causà^{PI}, S. Fusco^{PD}, B. Panunzi^{PI}, A. Roviello^{PI}, **R. Shikler^{PI}**, A. Tuzi^{PI}, "Color Tuning and Noteworthy Photoluminescence Quantum Yields in Crystalline Mono-/Dinuclear ZnII Complexes", *Eur. J. of Inorganic Chem.* **34** 5916-5924 (2014). IF 2.686 Q2 12/46 (ISI 25 GS 23)
28. F. Borbone^{PD}, U. Caruso^{PI}, S. Di Palma^D, S. Fusco^S, S. Nabha^S, B. Panunzi^{PI}, **R. Shikler^{PI}** "High Solid State Photoluminescence Quantum Yields and Effective Color Tuning in Polyvinylpyridine Based Zinc (II) Metallopolymers" *Macro. Chem. Phys.* **216** 1516-1522 (2015) IF 2.495 Q2 24/85 (ISI 23 GS 26)
29. F. Borbone^{PD}, U. Caruso^{PI}, S. Concilio^S, S. Nabha^S, B. Panunzi^{PI}, S. Piotto^S, **R. Shikler^{PI}**, A. Tuzi^{PI} "Mono-, Di-, and Polymeric Pyridinoylhydrazone ZnII Complexes: Structure and Photoluminescent Properties" *Eur. J. of Inorganic Chem.* **36**, 818-825 (2016). IF 2.686 Q2 12/46 (ISI 29 GS 28)
30. S. K. Bhunia^{PD}, S. Nandi^{PD}, **R. Shikler^{PI}**, R. Jelinek^{PI} "Tunable light-emitting carbon-dot/polymer flexible films prepared through one-pot synthesis", *Nanoscale* **8**, 3400-3406 (2016) IF 7.76 Q1 18/163 (ISI 56 GS 73)
31. S. Nabha-Barnea^S, N. Naman^{PD}, I. Visoly-Fisher^{PI}, **R. Shikler^{PI}** "Microscopic Investigation of Degradation Processes in a Polyfluorene Blend by Near-Field Scanning Optical Microscopy" *Macromolecules* **49**, 6439-6444 (2016). IF 5.554 Q1 7/85 (ISI 5 GS 6)
32. *D. Gotlyb^S, **R. Shikler^{PI}** "A new model of organic solar cells reveals open circuit conditions and size dependent power loss induced by the finite conductivity of a transparent contact", *J. Appl. Phys.* **121**, 045502 (2017) IF 2.101 Q2 47/145 (ISI 3 GS 4)
33. *F. Borbone^{PI}, U. Caruso^{PD}, S. Concilio^S, S. Nabha^S, S. Piotto^{PI}, **R. Shikler^{PI}**, A. Tuzi^{PI}, B. Panunzi^{PI} "From cadmium (II)- aroylhydrazone complexes to metallopolymers with enhanced photoluminescence. A structural and DFT study", *Inorg. Chimi. Acta*, **458**, 129-137 (2017) IF 1.918 Q2 22/46 (ISI 22 GS 28)
34. *F. Borbone^{PI}, A. Tuzi^{PI}, B. Panunzi^{PI}, S. Piotto^{PI}, S. Concilio^S, **R. Shikler^{PI}**, S. Nabha^S, R. Centore^{PD}, "On-Off Mechano-Responsive Switching of ESIPT Luminescence in Polymorphic N-salicylidene-4-amino-2-methylbenzotriazole" *Crys. Growth & Design*, **17**, 5517-5523 (2017) . IF 3.972 Q1 60/285 (ISI 17 GS 19)
35. *N. Wang^S, L. Zhan^S, S. Li^S, M. Shi^{PI}, T-K. Lau^C, X. Lu^C, **R. Shikler^{PI}**, C-Z. Li, H. Chen^{PI} "Enhancement of intra-and inter-molecular π -conjugated effects for the non-fullerene acceptor to achieve high-efficiency organic solar cells with extended photoresponse range and optimized morphology", *Mater. Chem. Front.* (2018). If 6.788 Q1 29/177 (ISI 23 GS 29)
36. *G. Capizzi^{PI}, G. Lo Sciuto^{PD}, C. Napoli^C, **R. Shikler^{PI}**, M. Woźniak^{PI}, "Optimizing the Organic Solar Cell Manufacturing Process by Means of AFM Measurements and Neural Networks", *Energies*, **11**, 1221 (2018). IF 2.707 Q2 48/97 (ISI 6 GS 11)
37. *B. Panunzi^{PI}, R. Diana^S, L. Sessa^S, **R. Shikler^{PI}**, S. Nabha^S, A. Tuzi^{PI}, U. Caruso^{PI}, S. Piotto^C, "Solid-state highly efficient DR mono and poly-dicyanophenylenevinylene fluorophores", *Molecules*, **23**, 1505 (2018). IF 3.060 Q2 67/162 (ISI 16 GS 13)
38. *B. Panunzi^{PI}, S. Concilio^C, R. Diana^S, **R. Shikler**, S. Nabha^S, S. Piotto^C, L. Sessa, A. Tuzi^{PI}, U. Caruso^{PI}, "Photophysical Properties of Luminescent Zinc

- (II)-Pyridinyloxadiazole Complexes and their Glassy Self-Assembly Networks”, *Eur. J. of Inorganic Chem.* **2018**, 2709-2716 (2018). IF 2.578 Q2 15/45 (ISI 25 GS 31)
39. * U. Caruso^{PI}, B. Panunzi^{PI}, R. Diana^S, L. Sessa^S, **R. Shikler^{PI}**, S. Nabha^S, A. Tuzi^{PI}, S. Piotto^C, “AIE/ACQ Effects in Two DR/NIR Emitters: A Structural and DFT Comparative Analysis”, *Molecules*, **23**, 1947 (2018)/ IF 3.060 Q2 67/162 (ISI 19 GS 25)
40. *H. Manis-Levy^S, T. Tempelman^S, N. Maman^{PD}, **R. Shikler^{PI}**, I. Visoly-Fisher^{PI}, Y. Golan^{PI}, G. Sarusi^{PI}, “Electrical and optical characterization of extended SWIR detectors based on thin films of nano-columnar PbSe”, *Infra. Phys. Technol.* **96**, 89-97 (2019). IF 2.379 Q2 40/97 (ISI 2 GS 5)
41. *N. Wang^S, W. Yang^S, S. Li^S, M. Shi^{PI}, T.-K. Lau^C, X. Lu^C, **R. Shikler^{PI}**, C.-Z. Li, H. Chen^{PI}, “A non-fullerene acceptor enables efficient P3HT-based organic solar cells with small voltage loss and thickness insensitivity”, *Chine. Chem. Lett.* (2019). IF 4.632 Q2 47/177 (ISI 12 GS 18)
42. *S. Bhattacharya^{PD}, R. S. Phatake^{PD}, S. N. Barnea^S, N. Zerby^S, J.-J. Zhu^S, **R. Shikler^{PI}**, N. G. Lemcoff^{PI}, R. Jelinek^{PI}, “Fluorescent Self-Healing Carbon Dot/Polymer Gels”, *ACS Nano*, **13**, 1433-1442 (2019). IF 14.588 Q1 11/159 (ISI 32 GS 82)
43. *R. Diana^S, B. Panunzi^{PI}, **R. Shikler^{PI}**, S. Nabha^S, U. Caruso^{PI}, “Highly efficient dicyano-phenylenevinylene fluorophore as polymer dopant or zinc-driven self-assembling building block”, *Inorg. Chem. Comm.*, **104**, 145-149 (2019). IF 1.943 Q3 23/45 (ISI 16 GS 20)
44. *R. Diana^S, B. Panunzi^{PI}, **R. Shikler^{PI}**, S. Nabha^S, U. Caruso^{PI}, “A symmetrical azo-based fluorophore and the derived salen multipurpose framework for emissive layers”, *Inorg. Chem. Comm.*, **104**, 186-189 (2019). IF 1.943 Q3 23/45 (ISI 9 GS 15)
45. *R. Avrahamy^S, M. Zohar^C, M. Auslender^C, Z. Fradkin^S, B. Milgrom^C, **R. Shikler^{PI}**, S. Hava^{PI}, “Upmost efficiency, few-microns-sized midwave infrared HgCdTe photodetector”, *Appl. Opt.* **58**, F1-F9 (2019). IF 1.961 Q3 53/97 (ISI 2 GS 6)
46. *D. Gotleyb^S, **R. Shikler^{PI}** “Role of the dielectric nature of the transparent contact in charge injection and collection in organic optoelectronic devices”, *Phys. Rev. Appl.*, **12**, 014029 (2019). IF 4.194 Q1 32/155 (ISI 1 GS 2)
47. *R. Diana^S, B. Panunzi^{PI}, F. Marrafino^S, R. Shikler^{PI}, T. Caruso^C, U. Caruso^{PI}, “The effect of bulky substituents on two π -conjugated mesogenic fluorophores. Their organic polymers and Zinc-bridged luminescent networks”, *Polymers*, **11**, 1379 (2019). If 3.426 Q1 16/89 (ISI 8 GS 15)
48. *G. L. Scuito^{PD}, C. Napoli^C, G. Capizzi^{PI}, **R. Shikler^{PI}**, “Organic solar cells defects detection by means of an elliptical basis neural network and a new feature extraction technique”, *Optik*, **194**, 163038 (2019). IF 2.187 Q2 46/97 (ISI 1 GS 4)
49. *C. Klein^S, S. Linde^C, **R. Shikler^{PI}**, G. Sarusi^{PI}, “Low work function Ca doped graphene as a transparent cathode for organic optoelectronics and OLEDs”, *Carbon*, **157**, 255-261 (2020). IF 8.821 Q1 26/159 (ISI 3 GS 12)
50. * R. Diana^S, U. Caruso^{PI}, S. Piotto^C, R. Shikler^{PI}, B. Panuzi^{PI}, “Spectroscopic Behaviour of Two Novel Azobenzene Fluorescent Dyes and Their Polymeric Blends”, *Molecules*, **25**, 1368 (2020). IF 3.267 Q2 70/177 (ISI 2 GS 4)

51. *R. Avrahamy^S, M. Zohar^C, M. Auslender^C, B. Milgrom^C, S. Hava^{PI}, **R. Shikler^{PI}** “In-depth investigation and applications of novel silicon photonics microstructures supporting optical vorticity and waveguiding for ultra-narrowband near-infrared perfect absorption”, *Photo. Res.*, **8**, 381-394 (2020) IF 6.099 Q1 10/97 (ISI 1 GS 7)
52. *H. M.-Levy^S, R. E. Abutbul^S, A. Grosman^S, H. Peled^S, Y. Golan^{PI}, N. Ashkenasy^{PI}, A. Sa'Ar^{PI}, **R. Shikler^{PI}**, G. Sarusi “The role of CdS doping in improving SWIR photovoltaic and photoconductive responses in solution grown CdS/PbS heterojunctions”, *Nanotechnology*, **31**, 255502 (2020). IF 3.551 Q2 40/155 (ISI 1 GS 3)
53. *H. M.-Levy^S, **R. Shikler^{PI}**, Y. Golan^{PI}, G. Sarusi^{PI}, “High photoconductive gain in a GaAs/PbS heterojunction based SWIR detector” *Appl. Phys. Lett.* **117**, 81107 (2020) IF 3.597 Q1 37/155 (ISI GS 2)
54. *S. N. Barnea^S, D. Gotley^{bS}, A. Yonish^S, **R. Shikler^{PI}** “Relating transient electroluminescence lifetime and bulk transit time in OLED during switch-off” *J. Mater. Chem. C.*, **9** 719-726 (2021). IF 7.059 Q1 21/155 (ISI GS 3)
55. *G. Lo Sciuto^{PI}, G. Cappizi^C, **R. Shikler^{PI}**, C. Napoli^{PI}, “Organic solar cells defects classification by using a new feature extraction algorithm and an EBNN with an innovative pruning algorithm.” *Int. J. Intell. Sys.* **36**, 2443-2446 (2021) IF 10.312 Q1 6/137 (ISI GS 1)
56. *G. Lo Sciuto^{PI}, C. Coco^C, **R. Shikler^{PI}**, A. Tamburrino^{PI}. “Pentacene organic thin-film transistor based on Archimedean interdigitated spiral pattern”, *Microelec. Eng.*, **247**, 111590 (2021) IF 2.523 Q2 133/273 (ISI GS)
57. *D. Gotlybe^S, **R. Shikler^{PI}**, “Metal-grid modeling and optimizations for organic solar cells”, *Sol. Eng. Mater. Sol. Cells*, **230**, 111212 (2021). IF 7.267 Q1 21/114 (ISI GS)