# Supriya Pillai

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4437937/publications.pdf

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|---|---|---|---|
| 46 papers | 3,743 citations | 394286 19 h-index | 454834 30 g-index |
| 46 all docs | 46 docs citations | 46 times ranked | 4368 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Plasmonics for Photovoltaics. , 2021, , 627-627. | | 0 |
| 2 | Evidence of Low-Temperature Joints in Silver Nanowire Based Transparent Conducting Layers for Solar Cells. ACS Applied Nano Materials, 2020, 3, 3205-3213. | 2.4 | 7 |
| 3 | Large-Area Nanosphere Gratings for Light Trapping and Reduced Surface Losses in Thin Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 1012-1019. | 1.5 | 8 |
| 4 | Light Harvesting in Organic Solar cells. , 2018, , 292-308. | | 0 |
| 5 | Plasmonics in Organic and Perovskite Solar Cells: Optical and Electrical Effects. Advanced Optical Materials, 2017, 5, 1600698. | 3.6 | 76 |
| 6 | Dark carrier dynamics and electrical characteristics of organic solar cells integrated with Ag-SiO2 core-shell nanoparticles. Synthetic Metals, 2017, 223, 34-42. | 2.1 | 4 |
| 7 | The Impact of parasitic loss on solar cells with plasmonic nano-textured rear reflectors. Scientific Reports, 2017, 7, 12826. | 1.6 | 30 |
| 8 | Interfacial engineering of hole transport layers with metal and dielectric nanoparticles for efficient perovskite solar cells. Physical Chemistry Chemical Physics, 2017, 19, 25016-25024. | 1.3 | 15 |
| 9 | Low-Temperature Solution Processed Random Silver Nanowire as a Promising Replacement for Indium Tin Oxide. ACS Applied Materials & Interfaces, 2017, 9, 34093-34100. | 4.0 | 23 |
| 10 | Low temperature solution process for random high aspect ratio silver nanowire as promising transparent conductive layer. , 2017, , . | | 0 |
| 11 | Realistic Silver Optical Constants for Plasmonics. Scientific Reports, 2016, 6, 30605. | 1.6 | 83 |
| 12 | Promising hybrid graphene-silver nanowire transparent conductive electrode. , 2016, , . | | 1 |
| 13 | Grain boundary effects on the optical constants and Drude relaxation times of silver films. Journal of Applied Physics, 2016, 120, . | 1.1 | 10 |
| 14 | Enhanced Broadband Light Trapping in c-Si Solar Cells Using Nanosphere-Embedded Metallic Grating Structure. IEEE Journal of Photovoltaics, 2016, 6, 61-67. | 1.5 | 15 |
| 15 | The effect of ageing on the scattering properties of silver nanoparticles for a plasmonic solar cell. Journal of Applied Physics, 2015, 118, 153102. | 1.1 | 8 |
| 16 | Nanosphere lithography for improved absorption in thin crystalline silicon solar cells. , 2015, , . | | 0 |
| 17 | Nanostructured metallic rear reflectors for thin solar cells: balancing parasitic absorption in metal and large-angle scattering. , 2015, , . | | 0 |
| 18 | Self-Assembled Nanostructured Rear Reflector Designs for Thin-Film Solar Cells. ACS Photonics, 2015, 2, 1108-1116. | 3.2 | 15 |

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|---|---|---|---|
| 19 | Re-evaluation of literature values of silver optical constants. Optics Express, 2015, 23, 2133. | 1.7 | 39 |
| 20 | Can plasmonic Al nanoparticles improve absorption in triple junction solar cells?. Scientific Reports, 2015, 5, 11852. | 1.6 | 23 |
| 21 | Porous Silicon Omnidirectional Bragg Reflector for Si Solar Cells. , 2014, , . | | 2 |
| 22 | Re-interpretation of Silver Optical Constants for Plasmonic Applications. , 2014, , . | | 0 |
| 23 | Plasmonic rear reflectors for thin-film solar cells: design principles from electromagnetic modelling. , 2014, , . | | 0 |
| 24 | Plasmonic degradation and the importance of over-coating metal nanoparticles for a plasmonic solar cell. Solar Energy Materials and Solar Cells, 2014, 122, 208-216. | 3.0 | 21 |
| 25 | Design of Anodic Aluminum Oxide Rear Surface Plasmonic Heterostructures for Light Trapping in Thin Silicon Solar Cells. IEEE Journal of Photovoltaics, 2014, 4, 1212-1219. | 1.5 | 10 |
| 26 | A novel silver nanoparticle assisted texture as broadband antireflection coating for solar cell applications. Solar Energy Materials and Solar Cells, 2013, 109, 233-239. | 3.0 | 37 |
| 27 | Angular reflection study to reduce plasmonic losses in the dielectrically displaced back reflectors of silicon solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 343-349. | 3.0 | 4 |
| 28 | Characterization of 2-D reflection pattern from textured front surfaces of silicon solar cells. Solar Energy Materials and Solar Cells, 2013, 115, 42-51. | 3.0 | 20 |
| 29 | Ageing effects on plasmonic properties for solar cell applications. , 2013, , . | | 0 |
| 30 | Effect of Surface Plasmon Resonance on the Photoluminescence from Si Quantum Dot Structures for Third Generation Solar Cell Applications. Materials Research Society Symposia Proceedings, 2012, 1391, 18. | 0.1 | 0 |
| 31 | The effect of rear surface passivation layer thickness on high efficiency solar cells with planar and scattering metal reflectors. , 2012, , . | | 0 |
| 32 | Plasmonics for Photovoltaics. , 2012, , 641-656. | | 0 |
| 33 | Harnessing plasmonics for solar cells. Nature Photonics, 2012, 6, 130-132. | 15.6 | 435 |
| 34 | Enhanced light trapping for high efficiency crystalline solar cells by the application of rear surface plasmons. Solar Energy Materials and Solar Cells, 2012, 101, 217-226. | 3.0 | 64 |
| 35 | The effect of dielectric spacer thickness on surface plasmon enhanced solar cells for front and rear side depositions. Journal of Applied Physics, 2011, 109, . | 1.1 | 125 |
| 36 | Nanoparticleâ€enhanced light trapping in thinâ€film silicon solar cells. Progress in Photovoltaics: Research and Applications, 2011, 19, 917-926. | 4.4 | 80 |

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|---|---|---|---|
| 37 | Surface plasmons for improving the performance of quantum dot structures for third generation solar cell applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 181-184. | 0.8 | 9 |
| 38 | Plasmonics for photovoltaic applications. Solar Energy Materials and Solar Cells, 2010, 94, 1481-1486. | 3.0 | 426 |
| 39 | Effective light trapping in polycrystalline silicon thin-film solar cells by means of rear localized surface plasmons. Applied Physics Letters, 2010, 96, . | 1.5 | 128 |
| 40 | Photovoltaic Plasmonics. , 2008, , . | | 0 |
| 41 | Surface plasmon enhanced silicon solar cells. Journal of Applied Physics, 2007, 101, 093105. | 1.1 | 1,624 |
| 42 | Absorption enhancement due to scattering by dipoles into silicon waveguides. Journal of Applied Physics, 2006, 100, 044504. | 1.1 | 87 |
| 43 | Enhanced emission from Si-based light-emitting diodes using surface plasmons. Applied Physics Letters, 2006, 88, 161102. | 1.5 | 242 |
| 44 | Surface plasmons for enhanced silicon light-emitting diodes and solar cells. Journal of Luminescence, 2006, 121, 315-318. | 1.5 | 71 |
| 45 | Enhancement of scattering and light-extraction by metal particles on silicon waveguides. , 2005, 6037, 57. | | 1 |
| 46 | Effects of dielectric overcoating on the absorption enhancement of SOI LEDs with metal island films. , 2005, , . | | 0 |