# Gururaj V Naik

## List of Publications by Citations



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|---|---|---|---|
| 50 papers | 4,685 citations | 24 h-index | 66 g-index |
| 66 ext. papers | 5,445 ext. citations | 7.4 avg, IF | 5.84 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 50 | Alternative plasmonic materials: beyond gold and silver. *Advanced Materials*, **2013**, 25, 3264-94 | 24 | 1395 |
| 49 | Oxides and nitrides as alternative plasmonic materials in the optical range [Invited]. *Optical Materials Express*, **2011**, 1, 1090 | 2.6 | 586 |
| 48 | Titanium nitride as a plasmonic material for visible and near-infrared wavelengths. *Optical Materials Express*, **2012**, 2, 478 | 2.6 | 468 |
| 47 | Refractory plasmonics with titanium nitride: broadband metamaterial absorber. *Advanced Materials* , **2014**, 26, 7959-65 | 24 | 432 |
| 46 | Demonstration of Al:ZnO as a plasmonic component for near-infrared metamaterials. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 8834-8 | 11.5 | 252 |
| 45 | Local heating with lithographically fabricated plasmonic titanium nitride nanoparticles. *Nano Letters*, **2013**, 13, 6078-83 | 11.5 | 199 |
| 44 | Epitaxial superlattices with titanium nitride as a plasmonic component for optical hyperbolic metamaterials. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 7546-51 | 11.5 | 164 |
| 43 | Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO). *Nano Letters*, **2013**, 13, 2857-63 | 11.5 | 153 |
| 42 | Role of epsilon-near-zero substrates in the optical response of plasmonic antennas. *Optica*, **2016**, 3, 339 | 8.6 | 112 |
| 41 | Towards CMOS-compatible nanophotonics: ultra-compact modulators using alternative plasmonic materials. *Optics Express*, **2013**, 21, 27326-37 | 3.3 | 98 |
| 40 | Semiconductors for plasmonics and metamaterials. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 295-297 | 2.5 | 94 |
| 39 | A comparative study of semiconductor-based plasmonic metamaterials. *Metamaterials*, **2011**, 5, 1-7 | | 87 |
| 38 | Plasmonic Resonances in Nanostructured Transparent Conducting Oxide Films. *IEEE Journal of Selected Topics in Quantum Electronics*, **2013**, 19, 4601907-4601907 | 3.8 | 68 |
| 37 | Fully CMOS-compatible titanium nitride nanoantennas. *Applied Physics Letters*, **2016**, 108, 051110 | 3.4 | 68 |
| 36 | Temperature-dependent optical properties of titanium nitride. *Applied Physics Letters*, **2017**, 110, 101901 | 3.4 | 59 |
| 35 | TiN/(Al,Sc)N metal/dielectric superlattices and multilayers as hyperbolic metamaterials in the visible spectral range. *Physical Review B*, **2014**, 90, | 3.3 | 41 |
| 34 | Development of epitaxial AlxSc1□N for artificially structured metal/semiconductor superlattice metamaterials. *Physica Status Solidi (B): Basic Research*, **2015**, 252, 251-259 | 1.3 | 40 |

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|---|---|---|---|
| 33 | Optical Properties of Gallium-Doped Zinc Oxide—A Low-Loss Plasmonic Material: First-Principles Theory and Experiment. *Physical Review X*, **2013**, 3, | 9.1 | 40 |
| 32 | Electronic and optical properties of ScN and (Sc,Mn)N thin films deposited by reactive DC-magnetron sputtering. *Journal of Applied Physics*, **2013**, 114, 063519 | 2.5 | 38 |
| 31 | Wavelength-Dependent Optical Force Imaging of Bimetallic Al-Au Heterodimers. *Nano Letters*, **2018**, 18, 2040-2046 | 11.5 | 34 |
| 30 | Photon upconversion with hot carriers in plasmonic systems. *Applied Physics Letters*, **2015**, 107, 133902 | 3.4 | 28 |
| 29 | Ultrabroadband terahertz conductivity of highly doped ZnO and ITO. *Optical Materials Express*, **2015**, 5, 566 | 2.6 | 27 |
| 28 | Hot-Carrier-Mediated Photon Upconversion in Metal-Decorated Quantum Wells. *Nano Letters*, **2017**, 17, 4583-4587 | 11.5 | 25 |
| 27 | Macroscopically Aligned Carbon Nanotubes as a Refractory Platform for Hyperbolic Thermal Emitters. *ACS Photonics*, **2019**, 6, 1602-1609 | 6.3 | 20 |
| 26 | Chemically Responsive Elastomers Exhibiting Unity-Order Refractive Index Modulation. *Advanced Materials*, **2018**, 30, 1703912 | 24 | 15 |
| 25 | Optical absorption of hyperbolic metamaterial with stochastic surfaces. *Optics Express*, **2014**, 22, 8893-901 | 3.3 | 14 |
| 24 | Optimum selective emitters for efficient thermophotovoltaic conversion. *Applied Physics Letters*, **2020**, 116, 023903 | 3.4 | 8 |
| 23 | Alternative Plasmonic Materials: Alternative Plasmonic Materials: Beyond Gold and Silver (Adv. Mater. 24/2013). *Advanced Materials*, **2013**, 25, 3258-3258 | 24 | 8 |
| 22 | In-plane electrical bias tunable optical properties of 1T-TaS2 [Invited]. *Optical Materials Express*, **2019**, 9, 497 | 2.6 | 8 |
| 21 | Macroscopically aligned carbon nanotubes for flexible and high-temperature electronics, optoelectronics, and thermoelectrics. *Journal Physics D: Applied Physics*, **2020**, 53, 063001 | 3 | 8 |
| 20 | Non-Hermitian Selective Thermal Emitters using Metal-Semiconductor Hybrid Resonators. *Advanced Materials*, **2019**, 31, e1904154 | 24 | 7 |
| 19 | Alternative Plasmonic Materials. *Handbook of Surface Science*, **2014**, 4, 189-221 | | 7 |
| 18 | In-situ power monitoring scheme and its application in dynamic voltage and threshold scaling for digital CMOS integrated circuits **2010**, | | 6 |
| 17 | 3D Imaging Using Extreme Dispersion in Optical Metasurfaces. *ACS Photonics*, **2021**, 8, 1421-1429 | 6.3 | 6 |
| 16 | Titanium nitride as a plasmonic material for visible and near-infrared wavelengths [erratum]. *Optical Materials Express*, **2013**, 3, 1658 | 2.6 | 5 |

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| 15 | Non-Hermitian metasurfaces for the best of plasmonics and dielectrics. *Optical Materials Express*, | 2.6 | 5 |
| 14 | Semiconductors for high selectivity thermal emitters. *Journal of Optics (United Kingdom)*, **2018**, 20, 084001 | 2.7 | 4 |
| 13 | Semiconductor plasmonic metamaterials for near-infrared and telecommunication wavelength **2010**, | | 4 |
| 12 | Large Optical Tunability from Charge Density Waves in 1T-TaS under Incoherent Illumination. *Nano Letters*, **2020**, 20, 7868-7873 | 11.5 | 4 |
| 11 | Light-induced reorganization of charge density wave stacking in 1T-TaS2. *Applied Physics Letters*, **2021**, 118, 253104 | 3.4 | 3 |
| 10 | Equilibration of Photogenerated Charge Carriers in Plasmonic [email protected] Nanoparticles. *Journal of Physical Chemistry C*, **2018**, 122, 23631-23638 | 3.8 | 3 |
| 9 | Metal Nitrides for Plasmonic Applications **2012**, | | 2 |
| 8 | Poly-ols Based Sol Gel Synthesis of Zinc Oxide Thin Films. *Journal of the Electrochemical Society*, **2011**, 158, H85 | 3.9 | 2 |
| 7 | Nanostructured Transparent Conductive Oxide Films for Plasmonic Applications **2013**, | | 2 |
| 6 | Nitrides as alternative materials for localized surface plasmon applications **2012**, | | 2 |
| 5 | Non-Hermitian metasurface with non-trivial topology. *Nanophotonics*, **2022**, 11, 1159-1165 | 6.3 | 2 |
| 4 | CMOS Compatible Ultra-Compact Modulator **2014**, | | 1 |
| 3 | Plasmonic modulator using CMOS-compatible material platform **2014**, | | 1 |
| 2 | Alternative Plasmonic Materials **2018**, 252-264 | | 1 |
| 1 | Reorganization of CDW stacking in 1T-TaS2 by an in-plane electrical bias. *APL Materials*, **2021**, 9, 111103 | 5.7 | 0 |