

Vasanthan Devaraj

List of Publications by Year in descending order

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| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Neural mechanism mimetic selective electronic nose based on programmed M13 bacteriophage. <i>Biosensors and Bioelectronics</i> , 2022, 196, 113693. | 10.1 | 18 |
| 2 | An Accessible Integrated Nanoparticle in a Metallic Hole Structure for Efficient Plasmonic Applications. <i>Materials</i> , 2022, 15, 792. | 2.9 | 7 |
| 3 | Three-Dimensional Plasmonic Nanocluster-Driven Light-Matter Interaction for Photoluminescence Enhancement and Picomolar-Level Biosensing. <i>Nano Letters</i> , 2022, 22, 4702-4711. | 9.1 | 20 |
| 4 | Biomaterial actuator of M13 bacteriophage in dynamically tunable plasmonic coupling structure. <i>Sensors and Actuators B: Chemical</i> , 2022, 369, 132326. | 7.8 | 6 |
| 5 | High quantum efficiency and stability of biohybrid quantum dots nanojunctions in bacteriophage-constructed perovskite. <i>Materials Today Nano</i> , 2021, 13, 100099. | 4.6 | 9 |
| 6 | Programmable self-assembly of M13 bacteriophage for micro-color pattern with a tunable colorization. <i>RSC Advances</i> , 2021, 11, 32305-32311. | 3.6 | 3 |
| 7 | Optical bioelectronic nose of outstanding sensitivity and selectivity toward volatile organic compounds implemented with genetically engineered bacteriophage: Integrated study of multi-scale computational prediction and experimental validation. <i>Biosensors and Bioelectronics</i> , 2021, 177, 112979. | 10.1 | 20 |
| 8 | Engineering Efficient Self-Assembled Plasmonic Nanostructures by Configuring Metallic Nanoparticle's Morphology. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10595. | 4.1 | 8 |
| 9 | Investigation of colorimetric biosensor array based on programable surface chemistry of M13 bacteriophage towards artificial nose for volatile organic compound detection: From basic properties of the biosensor to practical application. <i>Biosensors and Bioelectronics</i> , 2021, 188, 113339. | 10.1 | 26 |
| 10 | A DNA-derived phage nose using machine learning and artificial neural processing for diagnosing lung cancer. <i>Biosensors and Bioelectronics</i> , 2021, 194, 113567. | 10.1 | 19 |
| 11 | Trifluoromethyl-Group Bearing, Hydrophobic Bulky Cations as Defect Passivators for Highly Efficient, Stable Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100712. | 5.8 | 11 |
| 12 | A single bottom facet outperforms random multifacets in a nanoparticle-on-metallic-mirror system. <i>Nanoscale</i> , 2020, 12, 22452-22461. | 5.6 | 14 |
| 13 | Influence of cavity geometry towards plasmonic gap tolerance and respective near-field in nanoparticle-on-mirror. <i>Current Applied Physics</i> , 2020, 20, 1335-1341. | 2.4 | 6 |
| 14 | Carbon Nanotube Electrode-Based Perovskite-Silicon Tandem Solar Cells. <i>Solar Rrl</i> , 2020, 4, 2000353. | 5.8 | 19 |
| 15 | Sensitive and label-free shell isolated Ag NPs@Si architecture based SERS active substrate: FDTD analysis and in-situ cellular DNA detection. <i>Applied Surface Science</i> , 2020, 515, 145955. | 6.1 | 17 |
| 16 | Gap Plasmon of Virus-Templated Biohybrid Nanostructures Uplifting the Performance of Organic Optoelectronic Devices. <i>Advanced Optical Materials</i> , 2020, 8, 1902080. | 7.3 | 17 |
| 17 | Defining the plasmonic cavity performance based on mode transitions to realize highly efficient device design. <i>Materials Advances</i> , 2020, 1, 139-145. | 5.4 | 3 |
| 18 | Hierarchical Cluster Analysis of Medical Chemicals Detected by a Bacteriophage-Based Colorimetric Sensor Array. <i>Nanomaterials</i> , 2020, 10, 121. | 4.1 | 22 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Modifying Plasmonic-Field Enhancement and Resonance Characteristics of Spherical Nanoparticles on Metallic Film: Effects of Faceting Spherical Nanoparticle Morphology. <i>Coatings</i> , 2019, 9, 387. | 2.6 | 15 |
| 20 | Revealing Plasmonic Property Similarities and Differences Between a Nanoparticle on a Metallic Mirror and Free Space Dimer Nanoparticle. <i>Journal of the Korean Physical Society</i> , 2019, 75, 313-318. | 0.7 | 9 |
| 21 | A facile low-cost paper-based SERS substrate for label-free molecular detection. <i>Sensors and Actuators B: Chemical</i> , 2019, 291, 369-377. | 7.8 | 68 |
| 22 | Improvement of High Affinity and Selectivity on Biosensors Using Genetically Engineered Phage by Binding Isotherm Screening. <i>Viruses</i> , 2019, 11, 248. | 3.3 | 9 |
| 23 | Experimental and numerical evaluation of a genetically engineered M13 bacteriophage with high sensitivity and selectivity for 2,4,6-trinitrotoluene. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 5666-5670. | 2.8 | 8 |
| 24 | Dependences of the Near-Field Characteristics of the Nano-Gap Structure on the Difference between Pentagonal and Circular Nano-Wires: A Numerical Study. <i>New Physics: Sae Mulli</i> , 2019, 69, 25-30. | 0.1 | 0 |
| 25 | Numerical Analysis of Nanogap Effects in Metallic Nano-disk and Nano-sphere Dimers: High Near-field Enhancement with Large Gap Sizes. <i>Journal of the Korean Physical Society</i> , 2018, 72, 599-603. | 0.7 | 16 |
| 26 | Fabrication of Self-Assembled Nanoporous Structures from a Self-Templating M13 Bacteriophage. <i>ACS Applied Nano Materials</i> , 2018, 1, 2851-2857. | 5.0 | 5 |
| 27 | Deterministic coupling of epitaxial semiconductor quantum dots to hyperbolic metamaterial. <i>Optica</i> , 2018, 5, 832. | 9.3 | 8 |
| 28 | Self-Assembled Nanoporous Biofilms from Functionalized Nanofibrous M13 Bacteriophage. <i>Viruses</i> , 2018, 10, 322. | 3.3 | 13 |
| 29 | Distinguishable Plasmonic Nanoparticle and Gap Mode Properties in a Silver Nanoparticle on a Gold Film System Using Three-Dimensional FDTD Simulations. <i>Nanomaterials</i> , 2018, 8, 582. | 4.1 | 32 |
| 30 | Design for an efficient single photon source based on a single quantum dot embedded in a parabolic solid immersion lens. <i>Optics Express</i> , 2016, 24, 8045. | 3.4 | 16 |
| 31 | Maximum photon extraction from a single quantum dot embedded in a metal/dielectric-cladded cylindrical structure. <i>Journal of the Korean Physical Society</i> , 2016, 68, 1014-1018. | 0.7 | 3 |
| 32 | Fabrication of Ultra-smooth 10 nm Silver Films without Wetting Layer. <i>Applied Science and Convergence Technology</i> , 2016, 25, 32-35. | 0.9 | 6 |