Vasanthan Devaraj

List of Publications by Year
in descending order

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32	453	623734	752698
papers	citations	14	20
		h-index	g-index

36	36	36	455
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A facile low-cost paper-based SERS substrate for label-free molecular detection. Sensors and Actuators B: Chemical, 2019, 291, 369-377.	7.8	68
2	Distinguishable Plasmonic Nanoparticle and Gap Mode Properties in a Silver Nanoparticle on a Gold Film System Using Three-Dimensional FDTD Simulations. Nanomaterials, 2018, 8, 582.	4.1	32
3	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. Biosensors and Bioelectronics, 2021, 188, 113339.	10.1	26
4	Hierarchical Cluster Analysis of Medical Chemicals Detected by a Bacteriophage-Based Colorimetric Sensor Array. Nanomaterials, 2020, 10, 121.	4.1	22
5	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. Biosensors and Bioelectronics, 2021, 177, 112979.	10.1	20
6	Three-Dimensional Plasmonic Nanocluster-Driven Lightâ€“Matter Interaction for Photoluminescence Enhancement and Picomolar-Level Biosensing. Nano Letters, 2022, 22, 4702-4711.	9.1	20
7	Carbon Nanotube Electrodeâ€Based Perovskiteâ€“Silicon Tandem Solar Cells. Solar Rrl, 2020, 4, 2000353.	5.8	19
8	A DNA-derived phage nose using machine learning and artificial neural processing for diagnosing lung cancer. Biosensors and Bioelectronics, 2021, 194, 113567.	10.1	19
9	Neural mechanism mimetic selective electronic nose based on programmed M13 bacteriophage. Biosensors and Bioelectronics, 2022, 196, 113693.	10.1	18
10	Sensitive and label-free shell isolated Ag NPs@Si architecture based SERS active substrate: FDTD analysis and in-situ cellular DNA detection. Applied Surface Science, 2020, 515, 145955.	6.1	17
11	Gap Plasmon of Virusâ€Templated Biohybrid Nanostructures Uplifting the Performance of Organic Optoelectronic Devices. Advanced Optical Materials, 2020, 8, 1902080.	7.3	17
12	Design for an efficient single photon source based on a single quantum dot embedded in a parabolic solid immersion lens. Optics Express, 2016, 24, 8045.	3.4	16
13	Numerical Analysis of Nanogap Effects in Metallic Nano-disk and Nano-sphere Dimers: High Near-field Enhancement with Large Gap Sizes. Journal of the Korean Physical Society, 2018, 72, 599-603.	0.7	16
14	Modifying Plasmonic-Field Enhancement and Resonance Characteristics of Spherical Nanoparticles on Metallic Film: Effects of Faceting Spherical Nanoparticle Morphology. Coatings, 2019, 9, 387.	2.6	15
15	A single bottom facet outperforms random multifacets in a nanoparticle-on-metallic-mirror system. Nanoscale, 2020, 12, 22452-22461.	5.6	14
16	Self-Assembled Nanoporous Biofilms from Functionalized Nanofibrous M13 Bacteriophage. Viruses, 2018, 10, 322.	3.3	13
17	Trifluoromethylâ€Group Bearing, Hydrophobic Bulky Cations as Defect Passivators for Highly Efficient, Stable Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100712.	5.8	11
18	Revealing Plasmonic Property Similarities and Differences Between a Nanoparticle on a Metallic Mirror and Free Space Dimer Nanoparticle. Journal of the Korean Physical Society, 2019, 75, 313-318.	0.7	9

#	Article	IF	Citations
19	Improvement of High Affinity and Selectivity on Biosensors Using Genetically Engineered Phage by Binding Isotherm Screening. Viruses, 2019, 11, 248.	3.3	9
20	High quantum efficiency and stability of biohybrid quantum dots nanojunctions in bacteriophage-constructed perovskite. Materials Today Nano, 2021, 13, 100099.	4.6	9
21	Deterministic coupling of epitaxial semiconductor quantum dots to hyperbolic metamaterial. Optica, 2018, 5, 832.	9.3	8
22	Experimental and numerical evaluation of a genetically engineered M13 bacteriophage with high sensitivity and selectivity for 2,4,6-trinitrotoluene. Organic and Biomolecular Chemistry, 2019, 17, 5666-5670.	2.8	8
23	Engineering Efficient Self-Assembled Plasmonic Nanostructures by Configuring Metallic Nanoparticleâ€™s Morphology. International Journal of Molecular Sciences, 2021, 22, 10595.	4.1	8
24	An Accessible Integrated Nanoparticle in a Metallic Hole Structure for Efficient Plasmonic Applications. Materials, 2022, 15, 792.	2.9	7
25	Influence of cavity geometry towards plasmonic gap tolerance and respective near-field in nanoparticle-on-mirror. Current Applied Physics, 2020, 20, 1335-1341.	2.4	6
26	Fabrication of Ultra-smooth 10 nm Silver Films without Wetting Layer. Applied Science and Convergence Technology, 2016, 25, 32-35.	0.9	6
27	Biomaterial actuator of M13 bacteriophage in dynamically tunable plasmonic coupling structure. Sensors and Actuators B: Chemical, 2022, 369, 132326.	7.8	6
28	Fabrication of Self-Assembled Nanoporous Structures from a Self-Templating M13 Bacteriophage. ACS Applied Nano Materials, 2018, 1, 2851-2857.	5.0	5
29	Maximum photon extraction from a single quantum dot embedded in a metal/dielectric-cladded cylindrical structure. Journal of the Korean Physical Society, 2016, 68, 1014-1018.	0.7	3
30	Defining the plasmonic cavity performance based on mode transitions to realize highly efficient device design. Materials Advances, 2020, 1, 139-145.	5.4	3
31	Programmable self-assembly of M13 bacteriophage for micro-color pattern with a tunable colorization. RSC Advances, 2021, 11, 32305-32311.	3.6	3
32	Dependences of the Near-Field Characteristics of the Nano-Gap Structure on the Difference between Pentagonal and Circular Nano-Wires: A Numerical Study. New Physics: Sae Mulli, 2019, 69, 25-30.	0.1	0