

# Sajal Biring

## List of Publications by Year in descending order

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81  
papers

1,459  
citations

279798

23  
h-index

414414

32  
g-index

81  
all docs

81  
docs citations

81  
times ranked

1618  
citing authors

#	ARTICLE	IF	CITATIONS
1	Role of Antisite Disorder, Rare-Earth Size, and Superexchange Angle on Band Gap, Curie Temperature, and Magnetization of $R_{x/2}NiMnO_{6-x}$ Double Perovskites. ACS Applied Electronic Materials, 2019, 1, 141-153.	4.3	82
2	Exciplex-Forming Cohost for High Efficiency and High Stability Phosphorescent Organic Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2018, 10, 2151-2157.	8.0	66
3	Versatile Exciplex-Forming Co-Host for Improving Efficiency and Lifetime of Fluorescent and Phosphorescent Organic Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2018, 10, 24090-24098.	8.0	55
4	Anatase to rutile phase transition promoted by vanadium substitution in TiO <sub>2</sub> : A structural, vibrational and optoelectronic study. Ceramics International, 2017, 43, 14128-14134.	4.8	51
5	Oxygen and cerium defects mediated changes in structural, optical and photoluminescence properties of Ni substituted CeO <sub>2</sub> . Journal of Alloys and Compounds, 2019, 782, 689-698.	5.5	44
6	Efficient Plastic Recycling and Remolding Circular Economy Using the Technology of Trustâ€‘Blockchain. Sustainability, 2021, 13, 9142.	3.2	38
7	Selective near-infrared (NIR) photodetectors fabricated with colloidal CdS:Co quantum dots. Journal of Materials Chemistry C, 2019, 7, 7725-7733.	5.5	36
8	Vacuumâ€‘Processed Small Molecule Organic Photodetectors with Low Dark Current Density and Strong Response to Nearâ€‘Infrared Wavelength. Advanced Optical Materials, 2020, 8, 2000519.	7.3	34
9	A Comparative Study via Photophysical and Electrical Characterizations on Interfacial and Bulk Exciplex-Forming Systems for Efficient Organic Light-Emitting Diodes. ACS Applied Electronic Materials, 2020, 2, 1011-1019.	4.3	34
10	Light scattering from 2D arrays of monodispersed Ag-nanoparticles separated by tunable nano-gaps: spectral evolution and analytical analysis of plasmonic coupling. Optics Express, 2008, 16, 15312.	3.4	32
11	Structural and ferroelectric properties of perovskite $Pb_{1-x}K_{0.5x}Sm_{0.5x}TiO_3$ ceramics. RSC Advances, 2017, 7, 39434-39442.	3.6	32
12	Vacuum-deposited MoO <sub>3</sub> /Ag/WO <sub>3</sub> multilayered electrode for highly efficient transparent and inverted organic light-emitting diodes. Organic Electronics, 2018, 59, 266-271.	2.6	32
13	Solution processed Li <sub>5</sub> AlO <sub>4</sub> dielectric for low voltage transistor fabrication and its application in metal oxide/quantum dot heterojunction phototransistors. Journal of Materials Chemistry C, 2018, 6, 790-798.	5.5	30
14	Enhanced energy storage properties in A-site substituted Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> ceramics. Journal of Alloys and Compounds, 2019, 792, 95-107.	5.5	29
15	Optoelectronic properties of Cu <sub>3</sub> N thin films deposited by reactive magnetron sputtering and its diode rectification characteristics. Journal of Alloys and Compounds, 2019, 789, 428-434.	5.5	29
16	Ultra-Low Voltage Metal Oxide Thin Film Transistor by Low-Temperature Annealed Solution Processed LiAlO <sub>2</sub> Gate Dielectric. Electronic Materials Letters, 2020, 16, 22-34.	2.2	29
17	Investigation of <i>La</i> and <i>Al</i> substitution on the spontaneous polarization and lattice dynamics of the $Pb_{1-x}La_xTi_{1-x}Al_xO_3$ ceramics. Journal of Applied Physics, 2018, 123, .	2.5	27
18	Increase in depolarization temperature and improvement in ferroelectric properties by V <sup>5+</sup> doping in lead-free 0.94(Na <sub>0.5</sub> Bi <sub>0.5</sub> )TiO <sub>3</sub> -0.06BaTiO <sub>3</sub> ceramics. Journal of Applied Physics, 2018, 123, .	2.5	27

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19	Role of oxygen vacancies and interstitials on structural phase transition, grain growth, and optical properties of Ga doped TiO <sub>2</sub> . Journal of Applied Physics, 2018, 123, 245702.	2.5	26
20	Gate Interface Engineering for Subvolt Metal Oxide Transistor Fabrication by Using Ion-Conducting Dielectric with Mn <sub>2</sub> O <sub>3</sub> Gate Interface. ACS Applied Electronic Materials, 2020, 2, 25-34.	4.3	26
21	Role of Electron Donation of TiO <sub>2</sub> Gate Interface for Developing Solution-Processed High-Performance One-Volt Metal-Oxide Thin-Film Transistor Using Ion-Conducting Gate Dielectric. Journal of Physical Chemistry C, 2019, 123, 20278-20286.	3.1	25
22	Reduction of dark current density in organic ultraviolet photodetector by utilizing an electron blocking layer of TAPC doped with MoO <sub>3</sub> . Organic Electronics, 2019, 65, 150-155.	2.6	25
23	Solution processed low band gap ion-conducting gate dielectric for low voltage metal oxide transistor. Journal of Alloys and Compounds, 2019, 777, 1124-1132.	5.5	25
24	A micro-cavity forming electrode with high thermal stability for semi-transparent colorful organic photovoltaics exceeding 13% power conversion efficiency. Nano Energy, 2021, 80, 105565.	16.0	25
25	The effect of high temperature annealing on the antisite defects in ferromagnetic La <sub>2</sub> NiMnO <sub>6</sub> double perovskite. Journal of Magnetism and Magnetic Materials, 2019, 483, 114-123.	2.3	24
26	An Effective Optical Dual Gas Sensor for Simultaneous Detection of Oxygen and Ammonia. Sensors, 2019, 19, 5124.	3.8	24
27	Structural distortion, ferroelectricity and ferromagnetism in Pb(Ti <sup>1-x</sup> Fe <sup>x</sup> )O <sub>3</sub> . Journal of Alloys and Compounds, 2017, 701, 619-625.	5.5	23
28	Highly efficient ITO-free organic light-emitting diodes employing a roughened ultra-thin silver electrode. Organic Electronics, 2017, 42, 52-58.	2.6	22
29	Structural, dielectric and ferroelectric studies of thermally stable and efficient energy storage ceramic materials: (Na <sub>0.5</sub> -K Bi <sub>0.5</sub> -La )TiO <sub>3</sub> . Ceramics International, 2018, 44, 20178-20186.	4.8	21
30	Structural, thermally stable dielectric, and energy storage properties of lead-free (1-x)(Na <sub>0.5</sub> Bi <sub>0.5</sub> )TiO <sub>3</sub> -xKSbO <sub>3</sub> ceramics. Journal of Materials Science: Materials in Electronics, 2019, 30, 15005-15017.		
31	Improvement of energy storage properties with the reduction of depolarization temperature in lead-free (1-x)Na <sub>0.5</sub> Bi <sub>0.5</sub> TiO <sub>3</sub> -xAgTaO <sub>3</sub> ceramics. Journal of Applied Physics, 2019, 125, 2.5		19
32	Role of compensating Li/Fe incorporation in Cu <sub>0.945</sub> Fe <sub>0.055-x</sub> Li <sub>x</sub> O: structural, vibrational and magnetic properties. RSC Advances, 2017, 7, 31970-31979.	3.6	18
33	Fluorination effects of A-D-A-type small molecules on physical property and the performance of organic solar cell. Organic Electronics, 2018, 52, 342-349.	2.6	18
34	Transparent organic upconversion device targeting high- grade infrared visual image. Nano Energy, 2021, 86, 106043.	16.0	18
35	Vanadium substitution: A simple and economic way to improve UV sensing in ZnO. Journal of Applied Physics, 2018, 123, .	2.5	17
36	Highly efficient exciplex organic light-emitting devices employing a sputtered indium-tin oxide electrode with nano-pinhole morphology. Journal of Materials Chemistry C, 2017, 5, 12050-12056.	5.5	15

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37	Influence of Cation Order and Valence States on Magnetic Ordering in $\text{La}_{2-x}\text{Ni}_x\text{Mn}_{1-x}\text{O}_6$ . <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1900019.	1.5	15
38	Scalable Synthesis of a Sub-10 nm Chalcopyrite ( $\text{CuFeS}_2$ ) Nanocrystal by the Microwave-Assisted Synthesis Technique and Its Application in a Heavy-Metal-Free Broad-Band Photodetector. <i>ACS Omega</i> , 2020, 5, 25947-25953.	3.5	15
39	Effect of ionic size compensation by $\text{Ag}^+$ incorporation in homogeneous Fe-substituted ZnO: studies on structural, mechanical, optical, and magnetic properties. <i>RSC Advances</i> , 2018, 8, 24355-24369.	3.6	14
40	Structural and dielectric properties of $\text{Pb}(1-x)(\text{Na}_0.5\text{Sm}_0.5)_x\text{TiO}_3$ ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 10730-10738.	2.2	13
41	Carbazole-based small molecules for vacuum-deposited organic photovoltaic devices with open-circuit voltage exceeding 1ÅV. <i>Organic Electronics</i> , 2017, 47, 162-173.	2.6	13
42	Nanoplatfom based on ideally ordered arrays of short straight and long beer bottle-shaped nanochannels. <i>Microporous and Mesoporous Materials</i> , 2019, 287, 71-76.	4.4	13
43	Role of oxygen vacancies in Co/Ni Substituted $\text{CeO}_2$ : A comparative study. <i>Ceramics International</i> , 2019, 45, 3823-3832.	4.8	13
44	The effect of ZnO preparation on the performance of inverted polymer solar cells under one sun and indoor light. <i>Journal of Materials Chemistry C</i> , 2021, 9, 1196-1204.	5.5	13
45	$\text{Zn}_{1-x}\text{Si}_x\text{O}$ : Improved optical transmission and electrical conductivity. <i>Ceramics International</i> , 2017, 43, 5668-5673.	4.8	12
46	Size and strain dependent anatase to rutile phase transition in $\text{TiO}_2$ due to Si incorporation. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 19017-19024.	2.2	12
47	Structural, optical and mechanical properties of sol-gel synthesized Mn-doped $\text{CeO}_2$ . <i>Superlattices and Microstructures</i> , 2018, 122, 316-323.	3.1	12
48	Role of Ga-substitution in ZnO on defect states, carrier density, mobility and UV sensing. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 18686-18695.	2.2	12
49	Microwave-Polyol Synthesis of Sub-10-nm PbS Nanocrystals for Metal Oxide/Nanocrystal Heterojunction Photodetectors. <i>ACS Applied Nano Materials</i> , 2018, 1, 6063-6072.	5.0	11
50	Stabilization of anatase phase by uncompensated Ga-doping in $\text{TiO}_2$ : A structural phase transition, grain growth and optical property study. <i>Ceramics International</i> , 2018, 44, 22445-22455.	4.8	11
51	Effect of defect states and oxygen vacancies on optical transitions due to $\text{Co}^{2+}$ substitution in $\text{CeO}_2$ . <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	11
52	Solution processed $\text{Cu}_2\text{S}/\text{TiO}_2$ heterojunction for visible-near infrared photodetector. <i>Thin Solid Films</i> , 2020, 710, 138275.	1.8	11
53	Vacuum-Deposited Transparent Organic Photovoltaics for Efficiently Harvesting Selective Ultraviolet and Near-Infrared Solar Energy. <i>Solar Rrl</i> , 2021, 5, 2000564.	5.8	11
54	Resolving Cross-Sensitivity Effect in Fluorescence Quenching for Simultaneously Sensing Oxygen and Ammonia Concentrations by an Optical Dual Gas Sensor. <i>Sensors</i> , 2021, 21, 6940.	3.8	11

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55	Transparent photodetectors with ultra-low dark current and high photoresponse for near-infrared detection. <i>Organic Electronics</i> , 2021, 99, 106356.	2.6	10
56	A phosphorescent OLED with an efficiency roll-off lower than 1% at $10^4$ cd m <sup>-2</sup> achieved by reducing the carrier mobility of the donors in an exciplex co-host system. <i>Journal of Materials Chemistry C</i> , 2022, 10, 4955-4964.	5.5	10
57	(Pb <sub>1</sub> -Bi <sub>x</sub> )(Ti <sub>1</sub> -Mn <sub>x</sub> )O <sub>3</sub> : Competing mechanism of tetragonal-cubic phase on A/B site modifications. <i>Journal of Alloys and Compounds</i> , 2018, 765, 278-286.	5.5	9
58	Role of Li <sup>+</sup> and Fe <sup>3+</sup> in modified ZnO: Structural, vibrational, opto-electronic, mechanical and magnetic properties. <i>Ceramics International</i> , 2019, 45, 7232-7243.	4.8	9
59	A quantitative characterization of interaction between prion protein with nucleic acids. <i>Biochemistry and Biophysics Reports</i> , 2018, 14, 114-124.	1.3	8
60	Vacuum Deposited Transparent Organic Photovoltaics for Efficiently Harvesting Selective Ultraviolet and Near-Infrared Solar Energy. <i>Solar Rrl</i> , 2021, 5, 2170032.	5.8	8
61	Structural effect of phenylcarbazole-based molecules on the exciplex-forming co-host system to achieve highly efficient phosphorescent OLEDs with low efficiency roll-off. <i>Journal of Materials Chemistry C</i> , 2021, 9, 9453-9464.	5.5	8
62	High speed fabrication of aluminum nanostructures with 10 nm spatial resolution by electrochemical replication. <i>Nanotechnology</i> , 2008, 19, 355302.	2.6	7
63	Cu <sub>x</sub> Fe <sub>1-x</sub> O: hopping transport and ferromagnetism. <i>Royal Society Open Science</i> , 2017, 4, 170339.	2.4	7
64	Opto-electronic properties of Zn(1-x)VxO: Green emission enhancement due to V <sup>4+</sup> state. <i>Journal of Applied Physics</i> , 2017, 122, 025106.	2.5	7
65	Stable anatase phase with a bandgap in visible light region by a charge compensated Ga <sup>V</sup> (1:1) co-doping in TiO <sub>2</sub> . <i>Ceramics International</i> , 2020, 46, 8958-8970.	4.8	7
66	In-situ grown nanoscale p-n heterojunction of Cu <sub>2</sub> S-TiO <sub>2</sub> thin film for efficient photoelectrocatalytic H <sub>2</sub> evolution. <i>Surfaces and Interfaces</i> , 2022, 28, 101660.	3.0	7
67	The effect of gate dielectric deposition at different vacuum conditions on the field-effect mobility of pentacene based organic field effect transistors. <i>Thin Solid Films</i> , 2017, 636, 485-489.	1.8	6
68	Comparative studies on the properties of magnetron sputtered transparent conductive oxide thin films for the application in solar cell. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	6
69	Effect of Annealing on Structure, Optoelectronic and Photoresponsivity Properties of Sol-gel Prepared ZnO Nanoparticles. <i>Materials Today: Proceedings</i> , 2019, 17, 261-265.	1.8	5
70	Multicomponent Zn(1-x)Fe <sub>0.8</sub> Na <sub>0.2</sub> O semiconductors: Effect of dopant concentration and ionic radius on structural, opto-electronics, magnetic and sensing properties. <i>Materials Science in Semiconductor Processing</i> , 2019, 98, 121-130.	4.0	4
71	Dielectric/Semiconductor Interfacial p-Doping: A New Technique to Fabricate Solution-Processed High-Performance V Ambipolar Oxide Transistors. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020, 14, 2000268.	2.4	4
72	A Sequence-Dependent DNA Condensation Induced by Prion Protein. <i>Journal of Nucleic Acids</i> , 2018, 2018, 1-14.	1.2	3

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73	Reconciling the value of Schottky barriers in small molecular organic photovoltaics from J-V and C-V measurements at low temperatures towards the estimation of open circuit voltage at 0°C. Organic Electronics, 2019, 73, 166-171.	2.6	3
74	Pico-molar level detection of copper ion with extraordinarily high response by Ti-doped copper nitride fabricated via high power impulse magnetron sputtering. Sensors and Actuators B: Chemical, 2022, 360, 131632.	7.8	3
75	Tuning of particle plasmon resonances in binary dielectric medium. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 376, 125-127.	2.1	2
76	A Colorful Organic Photovoltaic Devices with a 5.48 % Power Conversion Efficiency. , 2019, , .		2
77	Structure, dielectric, and optical properties of PbTi(1-x)(V0.50Fe0.50)xO3 perovskite ceramics. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	2
78	844: <i>Invited Paper:</i> Near-Infrared Organic Upconversion Device with High Image Sensing Quality. Digest of Technical Papers SID International Symposium, 2018, 49, 1147-1150.	0.3	1
79	Organic Photodetectors: Vacuum-Processed Small Molecule Organic Photodetectors with Low Dark Current Density and Strong Response to Near-Infrared Wavelength (Advanced Optical Materials) Tj ETQq1 1 0.7843 14 rgBI /Overlock		
80	Structural and optical properties of aliovalent vanadium substituted TiO2. AIP Conference Proceedings, 2019, , .	0.4	0
81	Structural, opto-electronics and magnetic study of Fe/Si doped ZnO. Journal of Materials Science: Materials in Electronics, 2019, 30, 9344-9355.	2.2	0