

# Ashok Kumar Yadav

## List of Publications by Year in descending order

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95  
papers

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304602

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docs citations

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times ranked

2136  
citing authors

#	ARTICLE	IF	CITATIONS
1	Phase evolution in thermally annealed Ni/Bi multilayers studied by X-ray absorption spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 4415-4424.	1.3	4
2	Trimetallic oxide-hydroxide porous nanosheets for efficient water oxidation. <i>Chemical Engineering Journal</i> , 2022, 435, 135019.	6.6	13
3	Microwave-Assisted Coprecipitation Synthesis and Local Structural Investigation on NiO, $\text{Ni}(\text{OH})_2/\text{Co}_3\text{O}_4$ Nanosheets, and $\text{Co}_3\text{O}_4$ Nanorods Using X-ray Absorption Spectroscopy at Co $\text{K}$ -edge and Synchrotron X-ray Diffraction. <i>ACS Omega</i> , 2022, 7, 6700-6709.	1.6	3
4	CoFeVSb: A promising candidate for spin valve and thermoelectric applications. <i>Physical Review B</i> , 2022, 105, .	1.1	17
5	High-performance aqueous sodium-ion/sulfur battery using elemental sulfur. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11394-11404.	5.2	1
6	Electronic structure modulation of molybdenum-iron double-atom catalyst for bifunctional oxygen electrochemistry. <i>Chemical Engineering Journal</i> , 2022, 449, 137705.	6.6	14
7	Evolution of transition metal charge states in correlation with the structural and magnetic properties in disordered double perovskites $\text{Ca}_2\text{La}_x\text{FeRuO}_6$ (0.5 $\leq x \leq 2$ ). <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 21769-21783.	1.3	9
8	Role of diluent in the unusual extraction of $\text{Am}^{3+}$ and $\text{Eu}^{3+}$ ions with benzene-centered tripodal diglycolamides: local structure studies using luminescence spectroscopy and XAS. <i>New Journal of Chemistry</i> , 2021, 45, 16794-16803.	1.4	2
9	<i>In situ</i> self-organization of uniformly dispersed Co $\text{N}$ centers at moderate temperature without a sacrificial subsidiary metal. <i>Green Chemistry</i> , 2021, 23, 3115-3126.	4.6	24
10	Bright aspects of defects and dark traits of dopants in the photoluminescence of $\text{Er}_2\text{X}_2\text{O}_7$ : $\text{Eu}^{3+}$ (X = Ti and Zr) pyrochlore: an insight using EXAFS, positron annihilation and DFT. <i>Materials Advances</i> , 2021, 2, 3075-3087.	2.6	4
11	Two-Dimensional Tungsten Oxide/Selenium Nanocomposite Fabricated for Flexible Supercapacitors with Higher Operational Voltage and Their Charge Storage Mechanism. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 8102-8119.	4.0	32
12	Evolution of local structure and superconductivity in $\text{CaFe}_2\text{As}_2$ . <i>Journal of Physics Condensed Matter</i> , 2021, 33, 19LT01.	0.7	1
13	New Greener and Sustainable Methodology for Direct Sequestering and Analysis of Uranium Using a Maline Supramolecular Scaffold and Mechanistic Understanding through Speciation and Interaction Studies. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 7846-7862.	3.2	9
14	Self-Anchored Platinum-Decorated Antimony-Doped-Tin Oxide as a Durable Oxygen Reduction Electrocatalyst. <i>ACS Catalysis</i> , 2021, 11, 7006-7017.	5.5	17
15	Light Harvesting from Oxygen Vacancies and A- and B-Site Dopants in $\text{CaSnO}_3$ Perovskite through Efficient Photon Utilization and Local Site Engineering. <i>ACS Applied Electronic Materials</i> , 2021, 3, 3256-3270.	2.0	11
16	Local Structure Investigations of Sequential Sorption of U and Fe on Polyacrylamide Hydroxamic Acid Resins. <i>Inorganic Chemistry</i> , 2021, 60, 10158-10166.	1.9	4
17	Spectroscopic tools to probe multiple dopant induced elastic strain effect in doped ceria matrix: As electrolyte for ITSOFCs. <i>Journal of Molecular Structure</i> , 2021, 1235, 130258.	1.8	3
18	Multiphoton light emission in barium stannate perovskites driven by oxygen vacancies, $\text{Eu}^{3+}$ and $\text{La}^{3+}$ : accessing the role of defects and local structures. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 17479-17492.	1.3	13

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19	Stabilization of uranyl( $\text{UO}_2^{2+}$ ) by dipicolinic acid in aqueous medium. Dalton Transactions, 2021, 50, 1486-1495.	1.6	11
20	Determination x-ray mass attenuation coefficients for NbO <sub>2</sub> compound by SR source. AIP Conference Proceedings, 2021, . .	0.3	0
21	Highly Efficient and Selective Recovery of Technetium with a Novel MTPN Resin: A Remarkable Outcome of Bulky Cation–Bulky Anion Interactions. Industrial & Engineering Chemistry Research, 2021, 60, 551-557.	1.8	5
22	Investigations on the hydrolysis step of copper–chlorine thermochemical cycle for hydrogen production. International Journal of Energy Research, 2020, 44, 2845-2863.	2.2	23
23	Thermodynamic and spectroscopic investigation of Nb(V) and Pa(V) sorption on colloidal silica. Environmental Earth Sciences, 2020, 79, 1.	1.3	2
24	Investigation of in-situ oxygen vacancies dissociation mechanism and associated atomic scale reshuffling during oxy-ion migration in nanostructured co-doped ceria. Solid State Ionics, 2020, 345, 115157.	1.3	15
25	Insight into Speciation and Electrochemistry of Uranyl Ions in Deep Eutectic Solvents. Journal of Physical Chemistry B, 2020, 124, 181-189.	1.2	26
26	Structural and optical properties of transparent, tunable bandgap semiconductor: $\text{In}_{1-x}\text{Al}_x\text{Cr}_2\text{O}_3$ . Journal of Applied Physics, 2020, 128, 135703.	1.1	1
27	Self-Organized Single-Atom Tungsten Supported on the N-Doped Carbon Matrix for Durable Oxygen Reduction. ACS Applied Materials & Interfaces, 2020, 12, 43586-43595.	4.0	29
28	Interplay between local distortion at lattice sites with optical and electrical properties of Eu <sup>3+</sup> -doped MNbO <sub>3</sub> (M = Na and K) compounds. Materials Advances, 2020, 1, 2380-2394.	2.6	20
29	Unravelling oxygen driven $\text{In}^{\pm}$ to $\text{In}^2$ phase transformation in tungsten. Scientific Reports, 2020, 10, 14718.	1.6	26
30	X-ray Mass attenuation coefficients of Nb <sub>2</sub> O <sub>5</sub> over the energy range 18.9132-19.6882. Journal of Physics: Conference Series, 2020, 1495, 012025.	0.3	2
31	Exploring functionalized titania for task specific application of efficient separation of trivalent f-block elements. New Journal of Chemistry, 2020, 44, 6151-6162.	1.4	12
32	Achieving Bright Blue and Red Luminescence in Ca <sub>2</sub> SnO <sub>4</sub> through Defect and Doping Manipulation. Journal of Physical Chemistry C, 2020, 124, 16090-16101.	1.5	16
33	Highly Efficient Extraction of Trivalent f-Cations Using Several N-Pivot Tripodal Diglycolamide Ligands in an Ionic Liquid: The Role of Ligand Structure on Metal Ion Complexation. European Journal of Inorganic Chemistry, 2020, 2020, 191-199.	1.0	6
34	Cationic disorder: A pathway for demonstrating inverse exchange bias in $\text{GdCoRuO}_6$ . Physical Review B, 2020, 101, .	1.1	8
35	Investigation of New <i>B</i> -Site-Disordered Perovskite Oxide CaLaScRuO <sub>6</sub> $\cdot\frac{1}{2}$ : An Efficient Oxygen Bifunctional Electrocatalyst in a Highly Alkaline Medium. ACS Applied Materials & Interfaces, 2020, 12, 9190-9200.	4.0	35
36	X-ray absorption spectroscopy study of Ga-doping in reactively sputtered ZnO films. Thin Solid Films, 2020, 701, 137966.	0.8	11

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37	Highly Durable and Active Pt/Sb-Doped SnO <sub>2</sub> Oxygen Reduction Reaction Electrocatalysts Produced by Atomic Layer Deposition. ACS Applied Energy Materials, 2020, 3, 5774-5783.	2.5	27
38	Exploring Bursteinâ€“Moss type effects in nickel doped hematite dendrite nanostructures for enhanced photo-electrochemical water splitting. Physical Chemistry Chemical Physics, 2019, 21, 20463-20477.	1.3	77
39	Optical and electrical studies of Al substituted Cr <sub>2</sub> O <sub>3</sub> . AIP Conference Proceedings, 2019, , .	0.3	0
40	Remarkable Enhancement in Extraction of Trivalent <i>f</i> -Block Elements Using a Macrocyclic Ligand with Four Diglycolamide Arms: Synthesis, Extraction, and Spectroscopic and Density Functional Theory Studies. Inorganic Chemistry, 2019, 58, 14885-14899.	1.9	24
41	Investigation of Compression-Induced Deformations in Local Structure and Pore Architecture of ZIF-8 Using FTIR, X-ray Absorption, and Positron Annihilation Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 22273-22280.	1.5	34
42	Structural characterizations of copper complex using x-ray diffraction and x-ray absorption fine structure spectroscopy. AIP Conference Proceedings, 2019, , .	0.3	0
43	XANES, EXAFS, EPR, and First-Principles Modeling on Electronic Structure and Ferromagnetism in Mn Doped SnO <sub>2</sub> Quantum Dots. Journal of Physical Chemistry C, 2019, 123, 3067-3075.	1.5	15
44	Doping effect on the local structure of metamagnetic Co doped Ni/NiO:GO coreâ€“shell nanoparticles using X-ray absorption spectroscopy and the pair distribution function. Physical Chemistry Chemical Physics, 2019, 21, 1294-1307.	1.3	15
45	Exploration of Atomic Scale Changes during Oxygen Vacancy Dissociation Mechanism in Nanostructure Co-Doped Ceria: As Electrolytes for IT-SOFC. Journal of the Electrochemical Society, 2019, 166, F544-F554.	1.3	24
46	Structural studies of spray pyrolysis synthesized oxygen deficient anatase TiO <sub>2</sub> thin films by using X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2019, 21, 6198-6206.	1.3	12
47	Complexation of U(VI) with Cucurbit[5]uril: Thermodynamic and Structural investigation in aqueous medium. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 207, 354-362.	2.0	5
48	Structural investigations on uranium( <sup>vi</sup> ) and thorium( <sup>iv</sup> ) complexation with TBP and DHOA: a spectroscopic study. New Journal of Chemistry, 2018, 42, 5243-5255.	1.4	23
49	Investigating the evolution of local structure around Er and Yb in ZnO:Er and ZnO:Er, Yb on annealing using X-ray absorption spectroscopy. Journal of Applied Physics, 2018, 123, .	1.1	14
50	Local crystal structure in the vicinity of Cr in doped AlN thin films studied by X-ray absorption spectroscopy. Physical Chemistry Chemical Physics, 2018, 20, 13084-13091.	1.3	11
51	Local structure investigation of Ni doped ZnO thin films by X-ray absorption spectroscopy. Thin Solid Films, 2018, 647, 70-79.	0.8	8
52	Deciphering the Role of Charge Compensator in Optical Properties of SrWO <sub>4</sub> :Eu <sup>3+</sup> :A (A = Li <sup>+</sup> , Na <sup>+</sup> , K <sup>+</sup> ): Spectroscopic Insight Using Photoluminescence, Positron Annihilation, and X-ray Absorption. Inorganic Chemistry, 2018, 57, 821-832.	1.9	82
53	Local structure investigation on Mn and Co doped TiO <sub>2</sub> thin films by x-ray absorption spectroscopy. AIP Conference Proceedings, 2018, , .	0.3	0
54	Exploring Defect-Induced Emission in ZnAl <sub>2</sub> O <sub>4</sub> : An Exceptional Color-Tunable Phosphor Material with Diverse Lifetimes. Inorganic Chemistry, 2018, 57, 3963-3982.	1.9	72

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55	A diglycolamide-functionalized TREN-based dendrimer with a "crab-like"™ grip for the complexation of actinides and lanthanides. Dalton Transactions, 2018, 47, 15164-15172.	1.6	14
56	Probing local structures in (Ni/Co)-doped ZnO/PVDF composite flexible and freestanding films by using XAS and XPS studies. X-Ray Spectrometry, 2018, 47, 484-494.	0.9	2
57	First Report on the Complexation of Actinides and Lanthanides Using 2,2'-bis[2-((1,4,7-Triazonane-1,4,7-triyl)tris(2-oxoethane-2,1-diyl)) tris(oxy)) tris(N,N-dioctylacetamide): Synthesis, Extraction, Luminescence, EXAFS, and DFT Studies. Inorganic Chemistry, 2018, 57, 12987-12998.	1.9	23
58	The Magnetic Properties of Sol-Gel Synthesized $\text{TM}_{0.03}\text{Zn}_{0.97}\text{O}$ (TM: Mn, Fe, Co, Ni, Cu, Zn, Al, Ga, In, Sn, Pb, Bi, Sb, Te, Se, S, Si, Ge, As, P, V, Cr, Mo, W, Ta, Nb, Ti, Zr, Hf, Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Sc, Th, U, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr) Thin Films. Journal of Applied Physics, 2018, 124, 044301.	0.7	3
59	Probing local structure of co doped polyvinylidene fluoride-ZnO thin films using X-ray absorption spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 131, 115-123.	1.5	4
60	Origin of Blue-Green Emission in $\text{Ln}^{3+}\text{-Zn}_{2}\text{P}_{2}\text{O}_{7}$ and Local Structure of $\text{Ln}^{3+}$ Ion in $\text{Ln}^{3+}\text{-Zn}_{2}\text{P}_{2}\text{O}_{7}$ :Ln <sup>3+</sup> (Ln = Sm, Eu, Tb, Dy, Ho, Er, Tm, Yb, Lu, Sc, Th, U, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No, Lr) Thin Films. Journal of Applied Physics, 2017, 122, 044301.	1.9	53
61	Local Structure Investigation of Mn- and Co-Doped $\text{TiO}_{2}$ Thin Films by X-Ray Absorption Spectroscopy. ChemistrySelect, 2017, 2, 11012-11024.	0.7	5
62	Separation of $\text{Am}^{3+}$ and $\text{Eu}^{3+}$ using hexa-n-octyl nitrilo triacetamide (HONTA): complexation, extraction, luminescence, EXAFS and DFT studies. Dalton Transactions, 2017, 46, 16631-16639.	1.6	23
63	Structural, electronic, magnetic, and transport properties of the equiatomic quaternary Heusler alloy $\text{CoRhMnGe}$ : Theory and experiment. Physical Review B, 2017, 96, .	1.1	54
64	Review on local structural properties of ceria-based electrolytes for IT-SOFC. Ionics, 2017, 23, 1049-1057.	1.2	19
65	Structural, electronic, morphological, optical and magnetic properties of $\text{Mn}_{0.03}\text{Co}_x\text{Zn}_{0.97}\text{O}$ ( $0 \leq x \leq 0.03$ ) nanoparticles. Journal of Materials Science: Materials in Electronics, 2017, 28, 1938-1950.	1.1	4
66	Ti K-edge X-ray absorption spectra of spray pyrolysis synthesized $\text{TiO}_{2-x}$ and $\text{TiO}_{2-x}\text{N}_x$ thin films. AIP Conference Proceedings, 2017, .	0.3	0
67	Effect of oxygen partial pressure in deposition ambient on the properties of RF magnetron sputter deposited $\text{Gd}_{20}\text{O}_{30}$ thin films. Applied Optics, 2017, 56, 6114.	0.9	8
68	Synthesis, thermal characterization and local structure studies of Gd doped $\text{Th}_{0.7}\text{U}_{0.3}\text{O}_2$ using X-ray absorption spectroscopy. RSC Advances, 2016, 6, 63037-63048.	1.7	2
69	Local structure investigation of Co doped ZnO thin films prepared by RF sputtering technique. AIP Conference Proceedings, 2016, .	0.3	0
70	Extended x-ray absorption fine structure spectroscopy and x-ray absorption near edge spectroscopy study of aliovalent doped ceria to correlate local structural changes with oxygen vacancies clustering. Applied Physics Letters, 2016, 108, .	1.5	26
71	Local structural study of doped-ceria by EXAFS spectroscopy. AIP Conference Proceedings, 2016, .	0.3	4
72	Local structure studies of $\text{Fe}_2\text{TeO}_6$ using x-ray absorption spectroscopy. AIP Conference Proceedings, 2016, .	0.3	0

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73	Local structure studies of Ni doped ZnO/PVDF composite free-standing flexible thin films using XPS and EXAFS studies. Journal of Polymer Research, 2016, 23, 1.	1.2	8
74	Investigations on local structures in new Bi <sub>2x</sub> La <sub>2x</sub> UO <sub>6</sub> (x =) Tj ETQq0 0 0 rgBT /Overlock 10 7650-7664.	1.6	21
75	CO oxidation activity enhancement of Ce <sub>0.95</sub> Cu <sub>0.05</sub> O <sub>2</sub> induced by Pd co-substitution. Catalysis Science and Technology, 2016, 6, 8104-8116.	2.1	16
76	Investigation of Fe doped ZnO thin films by X-ray absorption spectroscopy. RSC Advances, 2016, 6, 74982-74990.	1.7	27
77	Luminescence Properties of SrZrO <sub>3</sub> /Tb <sup>3+</sup> Perovskite: Host-Dopant Energy-Transfer Dynamics and Local Structure of Tb <sup>3+</sup> . Inorganic Chemistry, 2016, 55, 1728-1740.	1.9	96
78	X-ray absorption spectroscopy of Mn doped ZnO thin films prepared by rf sputtering technique. AIP Advances, 2015, 5, 117138.	0.6	21
79	Local structural investigation of Sm in Sr <sub>2</sub> P <sub>2</sub> O <sub>7</sub> : A TRPLS, $\mu$ -SR K-edge EXAFS and Judd-Ofelt investigation. AIP Conference Proceedings, 2015, , .	0.3	0
80	Spectroscopic investigations on sorption of uranium onto suspended bentonite: effects of pH, ionic strength and complexing anions. Radiochimica Acta, 2015, 103, 293-303.	0.5	4
81	Morphology-controlled synthesis of monodispersed graphitic carbon coated core/shell structured Ni/NiO nanoparticles with enhanced magnetoresistance. Physical Chemistry Chemical Physics, 2015, 17, 32398-32412.	1.3	42
82	Nitrogen Location and Ti-O Bond Distances in Pristine and N-Doped TiO <sub>2</sub> Anatase Thin Films by X-ray Absorption Studies. Journal of Physical Chemistry C, 2015, 119, 17640-17647.	1.5	40
83	An insight into local environment of lanthanide ions in Sr <sub>2</sub> SiO <sub>4</sub> :Ln (Ln = Sm,) Tj ETQq1 1 0,784314,rgBT /Over	1.4	32
84	Speciation and site occupancy of uranium in strontium orthosilicate by photoluminescence and X-ray absorption spectroscopy: A combined experimental and theoretical approach. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 151, 453-458.	2.0	15
85	A comprehensive facility for EXAFS measurements at the INDUS-2 synchrotron source at RRCAT, Indore, India. Journal of Physics: Conference Series, 2014, 493, 012032.	0.3	146
86	Cation distribution in Ni <sub>1-x</sub> Zn <sub>x</sub> Fe <sub>2</sub> O <sub>4</sub> using X-ray absorption spectroscopy. , 2014, , .		1
87	Commissioning and first results of scanning type EXAFS beamline (BL-09) at INDUS-2 synchrotron source. AIP Conference Proceedings, 2014, , .	0.3	119
88	Effect of Zn doping on the magneto-caloric effect and critical constants of Mott insulator MnV <sub>2</sub> O <sub>4</sub> . AIP Advances, 2014, 4, .	0.6	5
89	Investigations into variations in local cationic environment in layered oxide series InGaO <sub>3</sub> (ZnO) <sub>m</sub> (m = 1-4). Dalton Transactions, 2014, 43, 2120-2126.	1.6	9
90	Electronic structure and sunlight driven water splitting activity correlation of (Zn <sub>1-y</sub> Ga <sub>y</sub> ) <sub>2</sub> (O <sub>1-z</sub> N <sub>z</sub> ). Physical Chemistry Chemical Physics, 2014, 16, 23654-23662.	1.3	12

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91	Photocatalytic H <sub>2</sub> Evolution from Water–Methanol System by Anisotropic InFeO <sub>3</sub> (ZnO) Oxides without Cocatalyst in Visible Light. ACS Applied Materials & Interfaces, 2014, 6, 12321-12327.	4.0	12
92	Chemical shift of Mn and Cr K-edges in X-ray absorption spectroscopy with synchrotron radiation. Bulletin of Materials Science, 2013, 36, 1067-1072.	0.8	33
93	Characterization of Sb-doped Bi <sub>2</sub> UO <sub>6</sub> Solid Solutions by X-ray Diffraction and X-ray Absorption Spectroscopy. Analytical Sciences, 2013, 29, 579-584.	0.8	8
94	X-ray absorption near-edge structure (XANES) studies on Sb-doped Bi <sub>2</sub> UO <sub>6</sub> at Bi and U edges. AIP Conference Proceedings, 2013, , .	0.3	1
95	Transport and magnetic properties of Fe doped CaMnO <sub>3</sub> . Journal of Applied Physics, 2012, 112, .	1.1	20