Aniruddha Deb

List of Publications by Year
in descending order

79 papers	1,972 citations	201674 27 h-index	276875 41 g-index
80 all docs	80 docs citations	80 times ranked	3236 citing authors

#	Article	IF	Citations
1	X-ray magnetic circular dichroismâ€”a high energy probe of magnetic properties. Coordination Chemistry Reviews, 2005, 249, 3-30.	18.8	132
2	In situx-ray absorption spectroscopic study of the Li[Ni1â^•3Co1â^•3Mn1â^•3]O2 cathode material. Journal of Applied Physics, 2005, 97, 113523.	2.5	92
3	Zinc stabilization of prefibrillar oligomers of human islet amyloid polypeptide. Chemical Communications, 2013, 49, 3339.	4.1	72
4	Synchrotron X-Ray Absorption Study of LiFePO[sub 4] Electrodes. Journal of the Electrochemical Society, 2005, 152, A191.	2.9	69
5	A Deâ€...Novo Designed Metalloenzyme for the Hydration of CO₂. Angewandte Chemie - International Edition, 2014, 53, 7900-7903.	13.8	69
6	Polarized XANES Monitors Femtosecond Structural Evolution of Photoexcited Vitamin B₁₂. Journal of the American Chemical Society, 2017, 139, 1894-1899.	13.7	64
7	Anomalous Ground State of the Electrons in Nanoconfined Water. Physical Review Letters, 2013, 111, 036803.	7.8	60
8	X-Ray Diffuse Scattering Measurements of Nucleation Dynamics at Femtosecond Resolution. Physical Review Letters, 2008, 100, 135502.	7.8	58
9	Structural investigations of LiFePO4 electrodes and in situ studies by Fe X-ray absorption spectroscopy. Electrochimica Acta, 2005, 50, 5200-5207.	5.2	57
10	Unveiling the pseudocapacitive charge storage mechanisms of nanostructured vanadium nitrides using in-situ analyses. Nano Energy, 2019, 60, 72-81.	16.0	57
11	Structural Investigations of LiFePO4Electrodes by Fe X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2004, 108, 7046-7051.	2.6	56
12	X-ray absorption spectroscopy study of the LixFePO4cathode during cycling using a novel electrochemicalin situreaction cell. Journal of Synchrotron Radiation, 2004, 11, 497-504.	2.4	55
13	Carrier-Density-Dependent Lattice Stability in InSb. Physical Review Letters, 2007, 98, 125501.	7.8	52
14	Electrochemical and Structural Investigation of the Mechanism of Irreversibility in Li₃V₂(PO₄)₃ Cathodes. Journal of Physical Chemistry C, 2016, 120, 7005-7012.	3.1	51
15	Understanding Spin Structure in Metallacrown Single-Molecule Magnets using Magnetic Compton Scattering. Journal of the American Chemical Society, 2014, 136, 4889-4892.	13.7	45
16	Magnetic Compton scattering study of theCo2FeGaHeusler alloy: Experiment and theory. Physical Review B, 2001, 63, .	3.2	42
17	In Situ X-Ray Absorption Spectroscopic Study of Li[sub 1.05]Ni[sub 0.35]Co[sub 0.25]Mn[sub 0.4]O[sub 2] Cathode Material Coated with LiCoO[sub 2]. Journal of the Electrochemical Society, 2007, 154, A534.	2.9	42
18	Electronic structure of the Cu2MnAl Heusler alloy. Journal of Physics Condensed Matter, 2000, 12, 2997-3012.	1.8	40

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19	Nanostructured Li 3 V 2 (PO 4) 3 /C composite as high-rate and long-life cathode material for lithium ion batteries. Electrochimica Acta, 2014, 143, 297-304.	5.2	36
20	Pseudocapacitive charge storage via hydrogen insertion for molybdenum nitrides. Journal of Power Sources, 2015, 289, 154-159.	7.8	36
21	Sn-contained N-rich carbon nanowires for high-capacity and long-life lithium storage. Electrochimica Acta, 2014, 127, 390-396.	5.2	34
22	Ultrafast X-ray Absorption Near Edge Structure Reveals Ballistic Excited State Structural Dynamics. Journal of Physical Chemistry A, 2018, 122, 4963-4971.	2.5	34
23	Structural and Electrochemical Investigation of Li(Ni[sub 0.4]Co[sub 0.15]Al[sub 0.05]Mn[sub]) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.9	32
24	Mesoporous Li3V2(PO4)3@CMK-3 nanocomposite cathode material for lithium ion batteries. Journal of Power Sources, 2014, 253, 294-299.	7.8	32
25	Determining the coordination environment and electronic structure of polymer-encapsulated cobalt phthalocyanine under electrocatalytic CO₂ reduction conditions using <i>in situ</i> X-Ray absorption spectroscopy. Dalton Transactions, 2020, 49, 16329-16339.	3.3	29
26	In situ X-ray absorption spectroscopyâ€"A probe of cathode materials for Li-ion cells. Fluid Phase Equilibria, 2006, 241, 4-19.	2.5	27
27	Competing Ferromagnetism and Superconductivity on FeAs Layers inEuFe2(As0.73P0.27)2. Physical Review Letters, 2010, 105, 207003.	7.8	27
28	Local structure of LiNi0.5Mn0.5O2 cathode material probed by in situ x-ray absorption spectroscopy. Journal of Applied Physics, 2006, 99, 063701.	2.5	26
29	<i>De Novo</i> Design and Characterization of Copper Metallopeptides Inspired by Native Cupredoxins. Inorganic Chemistry, 2015, 54, 9470-9482.	4.0	25
30	The Photoactive Excited State of the B₁₂-Based Photoreceptor CarH. Journal of Physical Chemistry B, 2020, 124, 10732-10738.	2.6	25
31	Synthesis, Characterization, and Electrochemical Performance of Ce-Doped Ordered Macroporous Li₃V₂(PO₄)₃/C Cathode Materials for Lithium Ion Batteries. Industrial & Engineering Chemistry Research, 2014, 53, 19525-19532.	3.7	24
32	High-Resolution X-ray Emission Spectroscopy of Molybdenum Compounds. Inorganic Chemistry, 2005, 44, 2579-2581.	4.0	22
33	The electrochemical and local structural analysis of the mesoporous Li4Ti5O12 anode. Journal of Power Sources, 2014, 268, 294-300.	7.8	22
34	Spin-dependent electron momentum density in theNi2MnSnHeusler alloy. Physical Review B, 2001, 63, .	3.2	21
35	<i>M-BLANK</i>: a program for the fitting of X-ray fluorescence spectra. Journal of Synchrotron Radiation, 2019, 26, 497-503.	2.4	21
36	Present status of the Cauchois-type Compton Scattering Spectrometer at SPring-8. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 467-468, 1109-1112.	1.6	20

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37	An Interprotein Coâ€“S Coordination Complex in the B₁₂-Trafficking Pathway. Journal of the American Chemical Society, 2020, 142, 16334-16345.	13.7	20
38	Characterization ofLa0.8Sr0.2FeO3âˆ'Î´andLa0.7Sr0.2FeO3âˆ'Î´as a function of temperature by x-ray absorption spectroscopy. Physical Review B, 2006, 73, .	3.2	19
39	Clarifying the Copper Coordination Environment in a <i>de Novo</i> Designed Red Copper Protein. Inorganic Chemistry, 2018, 57, 12291-12302.	4.0	19
40	Quantum Coherence and Temperature Dependence of the Anomalous State of Nanoconfined Water in Carbon Nanotubes. Journal of Physical Chemistry Letters, 2016, 7, 4433-4437.	4.6	17
41	Ultrafast XANES Monitors Femtosecond Sequential Structural Evolution in Photoexcited Coenzyme B₁₂. Journal of Physical Chemistry B, 2020, 124, 199-209.	2.6	17
42	Abnormal metal levels in the primary visual pathway of the DBA/2J mouse model of glaucoma. BioMetals, 2014, 27, 1291-1301.	4.1	16
43	Further insights into the metal ion binding abilities and the metalation pathway of a plant metallothionein from Musa acuminata. Journal of Biological Inorganic Chemistry, 2018, 23, 91-107.	2.6	16
44	Incorporation of second coordination sphere d-amino acids alters Cd(II) geometries in designed thiolate-rich proteins. Journal of Biological Inorganic Chemistry, 2018, 23, 123-135.	2.6	16
45	Probing a Silent Metal: A Combined X-ray Absorption and Emission Spectroscopic Study of Biologically Relevant Zinc Complexes. Inorganic Chemistry, 2020, 59, 13551-13560.	4.0	16
46	Ruâˆ'Oorbital hybridization and orbital occupation inSrRuO3: A magnetic Compton-profile study. Physical Review B, 2004, 70, .	3.2	15
47	Methylated Histidines Alter Tautomeric Preferences that Influence the Rates of Cu Nitrite Reductase Catalysis in Designed Peptides. Journal of the American Chemical Society, 2019, 141, 7765-7775.	13.7	15
48	The electronic structure and chemical bonding mechanism of silver oxide. Journal of Physics Condensed Matter, 1998, 10, 11719-11729.	1.8	12
49	Probing the Excited State of Methylcobalamin Using Polarized Time-Resolved X-ray Absorption Spectroscopy. Journal of Physical Chemistry B, 2019, 123, 6042-6048.	2.6	12
50	Soft-x-ray magnetic-circular-dichroism study of the colossal-magnetoresistance spinelFe0.5Cu0.5Cr2S4. Physical Review B, 2003, 68, .	3.2	11
51	Development of a single-cell X-ray fluorescence flow cytometer. Journal of Synchrotron Radiation, 2016, 23, 901-908.	2.4	10
52	Electrochemical and structural investigation of Mg-doped Li3V(2-2x/3)Mgx(PO4)3. Journal of Power Sources, 2018, 396, 491-497.	7.8	10
53	Antivitamins B₁₂ in a Microdrop: The Excited-State Structure of a Precious Sample Using Transient Polarized X-ray Absorption Near-Edge Structure. Journal of Physical Chemistry Letters, 2019, 10, 5484-5489.	4.6	10
54	Traversing the Redâ€“Greenâ€“Blue Color Spectrum in Rationally Designed Cupredoxins. Journal of the American Chemical Society, 2020, 142, 15282-15294.	13.7	10

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55	Making or Breaking Metalâ€Dependent Catalytic Activity: The Role of Stammers in Designed Threeâ€Stranded Coiled Coils. Angewandte Chemie - International Edition, 2020, 59, 20445-20449.	13.8	10
56	Magnetic Compton scattering study of colossal magnetoresistance materialsFe1â^'xCuxCr2S4. Physical Review B, 2002, 66, .	3.2	9
57	Compton scattering studies of the electron momentum distribution in indium phosphide. Radiation Physics and Chemistry, 1999, 54, 335-344.	2.8	7
58	Compton profile of vanadium carbide and vanadium nitride. Physical Review B, 1996, 53, 13393-13399.	3.2	6
59	Compton profile of scandium oxide. Radiation Physics and Chemistry, 1999, 54, 113-116.	2.8	6
60	Background noise in a Cauchois-type high-resolution Compton scattering spectrometer at SPring-8. Journal of Physics and Chemistry of Solids, 2001, 62, 2099-2102.	4.0	6
61	Compton scattering study of the electron momentum density inSr2RuO4. Physical Review B, 2003, 67, .	3.2	6
62	The Quantum Mechanics of Nano-Confined Water: New Cooperative Effects Revealed with Neutron and X-Ray Compton Scattering. Journal of Physics: Conference Series, 2014, 571, 012001.	0.4	6
63	Effect of substitution of Cl and Br for Se in the ferromagnetic spinelCuCr2Se4: A magnetic Compton profile study. Physical Review B, 2007, 75, .	3.2	5
64	Compton profile of cuprous oxide by linear combination of Gaussian orbitals. Journal of Physics Condensed Matter, 1996, 8, 5139-5148.	1.8	4
65	Nitrite reductase activity within an antiparallel de novo scaffold. Journal of Biological Inorganic Chemistry, 2021, 26, 855-862.	2.6	4
66	Compton scattering study on the electronic properties of niobium carbide and niobium nitride. Radiation Physics and Chemistry, 2000, 57, 135-144.	2.8	3
67	Evidence of negative spin polarization in ferromagneticSr2FeMoO6as observed in a magnetic Compton profile study. Physical Review B, 2004, 70, .	3.2	3
68	Open Reading Frame 1 Protein of the Human Long Interspersed Nuclear Element 1 Retrotransposon Binds Multiple Equivalents of Lead. Journal of the American Chemical Society, 2021, 143, 15271-15278.	13.7	3
69	Compton scattering studies on niobium carbide and vanadium carbide. Radiation Physics and Chemistry, 1998, 51, 517-518.	2.8	2
70	Cu(I) Binding to Designed Proteins Reveals a Putative Copper Binding Site of the Human Line1 Retrotransposon Protein ORF1p. Inorganic Chemistry, 2022, 61, 5084-5091.	4.0	2
71	A magnetic Compton scattering study of double perovskite Sr2FeMoO6. Journal of Physics Condensed Matter, 2004, 16, S5717-S5720.	1.8	1
72	Publisherâ€™s Note: Carrier-Density-Dependent Lattice Stability in InSb [Phys. Rev. Lett.98, 125501 (2007)]. Physical Review Letters, 2007, 98, .	7.8	1

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73	Competition of 3d/4f orbitals due to competing conductivity and ferromagnetism in Fe/CoAs layers in Eu(Fe0.89Co0.11)2As2. Journal of Applied Physics, 2013, 113, 013907.	2.5	1
74	Ballistic excited state dynamics revealed by polarized fs-XANES. EPJ Web of Conferences, 2019, 205, 05014.	0.3	1
75	Spin-dependent electron momentum densities in Co2FeGa studied by Compton scattering. Radiation Physics and Chemistry, 2001, 61, 545-546.	2.8	0
76	High-Resolution X-Ray Emission Spectroscopy of Molybdenum Compounds.. ChemInform, 2005, 36, no.	0.0	0
77	Imaging of 3dMn orbitals in the ferromagnetic state for Ca-substituted manganite: Magnetic Compton investigation. Physical Review B, 2012, 85, .	3.2	0
78	Making or Breaking Metalâ€Dependent Catalytic Activity: The Role of Stammers in Designed Threeâ€Stranded Coiled Coils. Angewandte Chemie, 2020, 132, 20625-20629.	2.0	0
79	Synthesis and characterization of amorphous Fe2.75Dy-oxide thin films demonstrating room-temperature semiconductor, magnetism, and optical transparency. Journal of Applied Physics, 2021, 129, 035701.	2.5	0