

# Ashis Bhattacharjee

## List of Publications by Year in descending order

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100  
docs citations

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times ranked

1841  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin Crossover Nanocrystals with Magnetic, Optical, and Structural Bistability Near Room Temperature. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 6433-6437.	13.8	281
2	Spin Crossover Phenomenon in Nanocrystals and Nanoparticles of $[\text{Fe}(\text{3-Fpy})_2\text{M}(\text{CN})_4]$ ( $\text{M} = \text{Ni, Pd, Pt}$ ) Two-Dimensional Coordination Polymers. <i>Chemistry of Materials</i> , 2010, 22, 4271-4281.	6.7	131
3	New Structural Aspects of $\pi$ -Pyrrolidinonate- and $\pi$ -Pyridonate-Bridged, Homo- and Mixed-Valence, Di- and Tetranuclearis-Diammineplatinum Complexes: A Eight New Crystal Structures, Stoichiometric 1:1 Mixture of $\text{Pt}(2.25^+)_4$ and $\text{Pt}(2.5^+)_4$ , New Quasi-One-Dimensional Halide-Bridged $[\text{Pt}(2.5^+)_4\text{-Cl}]_n$ System, and Consideration of Solution Properties. <i>Journal of the American Chemical Society</i> , 1998, 120, 8366-8379.	13.7	94
4	Maghemite polymer nanocomposites with modulated magnetic properties. <i>Acta Materialia</i> , 2007, 55, 2201-2209.	7.9	51
5	Hydrothermal synthesis of dimeric lanthanide compounds: X-ray structure, magnetic study and heterogeneous catalytic epoxidation of olefins. <i>Polyhedron</i> , 2010, 29, 3183-3191.	2.2	43
6	$\beta$ - $\text{Fe}_2\text{O}_3$ nanoparticle in NaY-zeolite matrix: Preparation, characterization, and heterogeneous catalytic epoxidation of olefins. <i>Inorganica Chimica Acta</i> , 2010, 363, 696-704.	2.4	43
7	Entrapment of $[\text{Ru}(\text{bpy})_3]^{2+}$ in the anionic metal-organic framework: Novel photoluminescence behavior exhibiting dual emission at room temperature. <i>Dalton Transactions</i> , 2011, 40, 6952.	3.3	42
8	Oxo-Vanadium(IV) Dihydrogen Phosphate: Preparation, Magnetic Study, and Heterogeneous Catalytic Epoxidation. <i>Langmuir</i> , 2008, 24, 5970-5975.	3.5	39
9	Solventless synthesis of hematite nanoparticles using ferrocene. <i>Journal of Materials Science</i> , 2013, 48, 2961-2968.	3.7	39
10	Study of the Negative Magnetization Phenomenon in $\text{NBu}_4[\text{FeIIFeIII}(\text{ox})_3]$ . <i>Journal of the Physical Society of Japan</i> , 1999, 68, 1679-1683.	1.6	38
11	Anomalous Spin Transition Observed in Bis(2,6-bis(pyrazol-3-yl)pyridine)iron(II) Thiocyanate Dihydrate. <i>Advanced Functional Materials</i> , 2003, 13, 877-882.	14.9	35
12	Cause for Unusually Large Thermal Hysteresis of Spin Crossover in $[\text{Fe}(\text{2-pic})_3]\text{Cl}_2 \cdot \text{H}_2\text{O}$ . <i>Bulletin of the Chemical Society of Japan</i> , 2004, 77, 921-932.	3.2	35
13	Effect of pressure and light on the spin transition behavior of the dinuclear iron(II) compound $[\text{FeII}(\text{PMAT})_2](\text{BF}_4)_2 \cdot \text{DMF}$ . <i>Applied Physics Letters</i> , 2008, 92, .	3.3	35
14	Magnetic susceptibility of some mixed-metal compounds $\text{NBu}_4\text{Fe(II)}[\text{Fe(III)}_x\text{Cr(III)}_{1-x}(\text{ox})_3]$ . <i>Journal of Magnetism and Magnetic Materials</i> , 1996, 153, 235-240.	2.3	32
15	Thermal Decomposition Study of Ferrocene $[(\text{C}_5\text{H}_5)_2\text{Fe}]$ . <i>Journal of Experimental Physics</i> , 2014, 2014, 1-8.	1.1	30
16	Heat Capacities and Phase Transitions of the Molecule-Based Mixed-Valence Complex $\text{NBu}_4[\text{FeIIFeIII}(\text{ox})_3]$ and the Mixed-Metal Complex $\text{NBu}_4[\text{ZnIIFeIII}(\text{ox})_3]^*$ . <i>Journal of the Physical Society of Japan</i> , 2000, 69, 479-488.	1.6	29
17	Adsorption-induced unusual changes in the electrical conductivity of ferrocene. <i>Journal of Physics and Chemistry of Solids</i> , 1989, 50, 1113-1119.	4.0	28
18	Heat capacity and magnetic phase transitions of rare-earth orthoferrite $\text{HoFeO}_3$ . <i>Journal of Physics and Chemistry of Solids</i> , 2002, 63, 569-574.	4.0	28

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19	Magnetic-Field-Dependent Heat Capacity of the Single-Molecule Magnet [Mn <sub>12</sub> O <sub>12</sub> (O <sub>2</sub> CEt) <sub>16</sub> (H <sub>2</sub> O) <sub>3</sub> ] <sup>#</sup> . <i>Inorganic Chemistry</i> , 2001, 40, 6632-6636.	4.0	23
20	Synthesis, X-ray crystal structure and magnetic study of a novel 1/2-1,1-azido bridged dimeric copper(II) complex. <i>Polyhedron</i> , 2007, 26, 1658-1662.	2.2	23
21	Electrical Conductivity of Benzoylferrocene in Presence of Adsorbed Vapors. <i>Japanese Journal of Applied Physics</i> , 1993, 32, 1568-1574.	1.5	22
22	Study of the magnetic phase transition in a cyanide-bridged molecule-based material: [Mn(cyclam)][Fe(CN) <sub>6</sub> ] <sup>3-</sup> ·3H <sub>2</sub> O (cyclam=1,4,8,11-tetraazacyclotetradecane). <i>Physica B: Condensed Matter</i> , 2001, 305, 56-64.	2.7	22
23	Preparation, characterization and electrical study of gum arabic/ZnO nanocomposites. <i>Bulletin of Materials Science</i> , 2015, 38, 1609-1616.	1.7	22
24	Magnetic Susceptibility of Some Mixed-Metal Compounds: $NBu_4Zn(II)_x[Fe(III)(ox)_3]_{1-x}$ . <i>Japanese Journal of Applied Physics</i> , 1995, 34, 1521-1525.	1.5	21
25	Heat capacity calorimetry of two Mn <sup>4+</sup> large-spin clusters: [Mn <sub>4</sub> (hmp) <sub>6</sub> R <sub>2</sub> ](ClO <sub>4</sub> ) <sub>2</sub> [Hhmp=2-hydroxymethylpyridine, R=OAc <sup>-</sup> or Cl <sup>-</sup> ]. <i>Polyhedron</i> , 2001, 20, 1607-1613.	2.2	17
26	Microstructural and magnetic characterization of fly ash from Kolaghat Thermal Power Plant in West Bengal, India. <i>Journal of Magnetism and Magnetic Materials</i> , 2011, 323, 3007-3012.	2.3	17
27	Electrical conductivity behavior of Gum Arabic biopolymer-Fe <sub>3</sub> O <sub>4</sub> nanocomposites. <i>Journal of Physics and Chemistry of Solids</i> , 2018, 112, 73-79.	4.0	17
28	High-precision detection of the heat-capacity anomaly due to spin reorientation in TmFeO <sub>3</sub> and HoFeO <sub>3</sub> . <i>Solid State Communications</i> , 2001, 120, 129-132.	1.9	16
29	Calorimetric investigation of phase transitions in the layered antiferromagnetic molecule-based material {N(n-C <sub>5</sub> H <sub>11</sub> ) <sub>4</sub> [MnIIFeIII(ox) <sub>3</sub> ]} <sup>n</sup> ·z(ox=oxalato). <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 280, 1-9.	2.3	15
30	X-ray powder diffraction and LIESST-effect of the spin transition material [Fe(bpp) <sub>2</sub> ](NCS) <sub>2</sub> ·2H <sub>2</sub> O. <i>Chemical Physics Letters</i> , 2006, 431, 72-77.	2.6	15
31	Structural and magnetic diversity in metal-dicyanamido polymer moieties: Paramagnetic and antiferromagnetic 1D chain compound and weakly ferromagnetic 2D motif. <i>Inorganica Chimica Acta</i> , 2009, 362, 4663-4670.	2.4	15
32	Pressure Effect Studies on the Spin-Transition Behavior of a Dinuclear Iron(II) Compound. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 843-849.	2.0	15
33	Effect of organic cation (A) on the magnetic susceptibility of AFe(ii)[Fe(iii)(ox) <sub>3</sub> ], A = N(C <sub>3</sub> H <sub>7</sub> ) <sub>4</sub> , As(C <sub>6</sub> H <sub>5</sub> ) <sub>4</sub> , N(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> . <i>Journal of Materials Science Letters</i> , 1996, 15, 102-104.	0.5	14
34	Magnetic properties of oxalate ligand based molecular materials: NBu <sub>4</sub> M(II)[Fe(III)(ox) <sub>3</sub> ], Bu <sub>4</sub> -n-(C <sub>4</sub> H <sub>9</sub> ) <sub>4</sub> , M=Co, Cr. <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 195, 336-344.	2.3	14
35	Mössbauer spectroscopy under a magnetic field to explore the low-temperature spin structure of the layered ferrimagnetic material $N(n-C_4H_9)_4[FeIIFeIII(C_2O_4)_3]$ . <i>Journal of Physics Condensed Matter</i> , 2003, 15, 5103-5112.	1.8	14
36	Metal-to-metal electron transfer and magnetic interactions in a mixed-valence Prussian Blue analogue. <i>Journal of Magnetism and Magnetic Materials</i> , 2006, 302, 173-180.	2.3	14

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37	Adsorption-Induced Unusual Changes in the Electrical Conductivity of Some Ferrocene Derivatives. Bulletin of the Chemical Society of Japan, 1991, 64, 3129-3136.	3.2	13
38	Adsorption-Induced Electrical Conductivity of Some Ferrocene Derivatives: Rates of Adsorption and Desorption of Vapors. Bulletin of the Chemical Society of Japan, 1992, 65, 3462-3469.	3.2	13
39	Rod-like ferrites obtained through thermal degradation of a molecular ferrimagnet. Journal of Alloys and Compounds, 2010, 503, 449-453.	5.5	13
40	Synthesis, X-ray crystal structure and magnetic study of a dicyanamido bridged 1D chain nickel(II) complex. Inorganica Chimica Acta, 2008, 361, 183-187.	2.4	12
41	Organometallic Photoconductors: Dark and Photoconductive Studies on Ferrocene and Some of Its Derivatives. Bulletin of the Chemical Society of Japan, 1994, 67, 607-611.	3.2	11
42	Magnetic properties of quasi-2D antiferromagnet $\{N(n-C_5H_{11})_4[MnIIFeIII(ox)_3]\}^{\cdot z}$ below $N\ddot{A}^{\circ}el$ temperature: revisited. Journal of Magnetism and Magnetic Materials, 2004, 268, 380-387.	2.3	11
43	Solventless synthesis, morphology, structure and magnetic properties of iron oxide nanoparticles. Solid State Sciences, 2017, 74, 62-69.	3.2	11
44	CdS nanoparticles ( $\&lt; \hat{a} \epsilon \% 5 \text{ \AA} nm$ ): green synthesized using Termitomyces heimii mushroom $\hat{a} \epsilon$ structural, optical and morphological studies. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	11
45	Magnetic field dependent heat capacity of the molecule-based magnetic material $NBu_4[FeIIFeIII(ox)_3]$ ( $Bu = n-C_4H_9+$ , $ox = oxalate$ ). Solid State Communications, 2000, 113, 543-548.	1.9	10
46	AC Magnetic Susceptibility of the Assembled-Metal Complex $\{NBu_4[FeIIFeIII(ox)_3]\}^{\hat{a} z}(Bu = n-C_4H_9,)$ Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.6	10
47	A cyano-bridged bimetallic ferrimagnet: Synthesis, X-ray structure and magnetic study. Polyhedron, 2010, 29, 2762-2768.	2.2	10
48	Thermal Decomposition Reaction of Ferrocene in the Presence of Oxalic Acid. International Journal of Chemical Kinetics, 2017, 49, 319-332.	1.6	10
49	Study of thermal spin crossover in $[Fe(II)(isoxazole)_6](BF_4)_2$ with $M\ddot{A} \ddot{r} ssbauer$ spectroscopy. Journal of Physics Condensed Matter, 2007, 19, 406202.	1.8	9
50	Synchrotron powder-diffraction study of the spin transition compound $[Fe(bpp)_2](NCS)_2 \cdot 2H_2O$ and soft X-ray-induced structural phase conversion. Journal of Molecular Structure, 2008, 890, 178-183.	3.6	9
51	A preliminary study on the nature of particulate matters in vehicle fuel wastes. Environmental Monitoring and Assessment, 2011, 176, 473-481.	2.7	9
52	Phase transitions in mixed-valence potassium manganese hexacyanoferrate Prussian blue analogue: Heat capacity calorimetric study. Journal of Magnetism and Magnetic Materials, 2007, 312, 435-442.	2.3	8
53	Synthesis, X-ray crystal structure and magnetic study of a $1/4$ 1,5-dca bridged ferromagnetic dimeric copper(II) complex. Journal of Coordination Chemistry, 2008, 61, 3486-3492.	2.2	8
54	Pressure-induced hysteresis in the high spin $\leftarrow$ low spin transition in bis(2,4-bis(pyridin-2-yl)thiazole) iron(II) tetrafluoroborate. Journal of Physics Condensed Matter, 2009, 21, 026011.	1.8	8

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55	Thermal Decomposition of Molecular Materials $\{N(n-C_4H_9)_4[Fe(II)Fe(III)(C_2O_4)_3]\}$ . International Journal of Thermophysics, 2012, 33, 2351-2365.	2.1	8
56	Calorimetric observation of the effect of non-magnetic organic cation (A) on the magnetic properties of $A[Fe(II)Fe(III)(ox)_3]$ , $A=N(n-C_3H_7)_4+$ or $N(n-C_4H_9)_4+$ . Solid State Communications, 2000, 115, 639-643.	1.9	7
57	Electrical conduction property of molecular magnetic material $\{N(n-C_4H_9)_4[Fe(II)Fe(III)(C_2O_4)_3]\}$ : Before and after thermal degradation. Physica B: Condensed Matter, 2010, 405, 1546-1550.	2.7	7
58	Kinetic Analysis of Nonisothermal Decomposition of Acetyl Ferrocene. International Journal of Chemical Kinetics, 2018, 50, 259-272.	1.6	7
59	Solventless synthesis and characterization of $\hat{I}^{\pm}$ -Fe, $\hat{I}^3$ -Fe, magnetite and hematite using iron(III)citrate. Solid State Sciences, 2019, 95, 105932.	3.2	7
60	Dark and photoconductive properties of hydroxymethylferrocene. Synthetic Metals, 1998, 97, 63-68.	3.9	6
61	Heat capacity calorimetry of a molecule-based magnetic material. Journal of Alloys and Compounds, 2001, 326, 251-254.	5.5	6
62	Calorimetric investigation of the magnetic transition in quasi-one-dimensional molecule-based ferrimagnets: $[Mn(\hat{O}C_14H_{29})_4TPP][TCNE] \cdot MeOH$ and $[MnF_4TPP][TCNE] \cdot 0.5MeOH$ . Journal of Physics and Chemistry of Solids, 2005, 66, 147-154.	4.0	6
63	$\hat{M}\hat{A}\hat{r}$ ssbauer spectroscopic study of the thermal spin crossover in $[Fe(II)(isoxazole)_6](ClO_4)_2$ . Journal of Physics and Chemistry of Solids, 2008, 69, 2713-2718.	4.0	6
64	Microstructural and magnetic characterization of dusts from a stone crushing industry in Birbhum, India. Journal of Magnetism and Magnetic Materials, 2010, 322, 3724-3727.	2.3	6
65	Thermal degradation of a molecular magnetic material: $\{N(n-C_4H_9)_4[Fe(II)Fe(III)(C_2O_4)_3]\}$ . Journal of Thermal Analysis and Calorimetry, 2012, 109, 1423-1427.	3.6	6
66	Comparative study of the microstructural and magnetic properties of fly ashes obtained from different thermal power plants in West Bengal, India. Environmental Monitoring and Assessment, 2013, 185, 8673-8683.	2.7	6
67	Characterization of dielectric properties of developed $CdS \hat{e}$ gum arabic composites in low frequency region. Polymer Composites, 2016, 37, 108-114.	4.6	6
68	Adsorption-induced electrical conductivity of ferrocene: Rates of adsorption and desorption of vapors. Journal of Physics and Chemistry of Solids, 1991, 52, 1187-1192.	4.0	5
69	Effect of reaction protocol on the nature and size of iron oxide nano particles obtained through solventless synthesis using iron(II)acetate: structural, magnetic and morphological studies. SN Applied Sciences, 2020, 2, 1.	2.9	5
70	Magnetic Susceptibility of Mixed-Metal Compounds: $NBu_4M(II)[Fe(III)0.5Cr(III)0.5(ox)_3]$ , Bu = Butyl, M = Mn, Fe. Physica Status Solidi A, 1997, 159, 503-508.	1.7	4
71	$\hat{M}\hat{A}\hat{r}$ ssbauer spectroscopic study of low-temperature spin structure and magnetic interactions in. Journal of Physics Condensed Matter, 2007, 19, 356201.	1.8	4
72	Molecular material $\{N(n-C_4H_9)_4[Ni(II)0.5Fe(II)0.5Fe(III)(C_2O_4)_3]\}$ : Magnetic, $\hat{M}\hat{A}\hat{r}$ ssbauer and electrical conductivity studies. Physica B: Condensed Matter, 2009, 404, 3448-3451.	2.7	4

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73	Thermal decomposition of a molecular material $\{N(n-C_4H_9)_4[FeIIFeIII(C_2O_4)_3]\}_n$ leading to ferrite: A reaction kinetics study. <i>Journal of the Serbian Chemical Society</i> , 2013, 78, 523-536.	0.8	4
74	Insights into the thermal decomposition of organometallic compound ferrocene carboxaldehyde as precursor for hematite nanoparticles synthesis. <i>Zeitschrift Fur Physikalische Chemie</i> , 2022, 236, 1137-1161.	2.8	4
75	Magnetism of a New oxalate-BRIDGED Metal Complex $\{NPr_4[MnCr(ox)_3]\}_x$ . <i>Molecular Crystals and Liquid Crystals</i> , 1996, 286, 141-146.	0.3	3
76	Effect of non-magnetic organic cation (A) on the magnetic properties of $ANiII[FeIII(ox)_3]$ , and $N(n-C_3H_7)_4^{4+}$ . <i>Solid State Communications</i> , 1999, 111, 601-606.	1.9	3
77	Title is missing!. <i>Journal of Materials Science Letters</i> , 1999, 18, 885-887.	0.5	3
78	Mössbauer spectroscopy in molecular magnetism. <i>Hyperfine Interactions</i> , 2009, 189, 3-19.	0.5	3
79	Effect of Co-precursor Malic Anhydride on the Thermal Decomposition of Acetyl Ferrocene: A Reaction Kinetic Analysis. <i>Current Physical Chemistry</i> , 2019, 9, 22-35.	0.2	3
80	Kinetics Study of the Solid State Reaction of Iron(III)Citrate Leading to Hematite Nanoparticles. <i>Current Physical Chemistry</i> , 2019, 8, 290-302.	0.2	3
81	Structural, magnetic and Mössbauer spectroscopic studies of the $[Fe(3-bpp)_2](CF_3COO)_2$ complex: role of crystal packing leading to an incomplete Fe(II) high spin $\leftrightarrow$ low spin transition. <i>CrystEngComm</i> , 2021, 23, 2854-2861.	2.6	3
82	Effects of mechanical pressure on charge transport in ferrocene in the presence of adsorbed vapours. <i>Journal of Materials Science</i> , 1992, 27, 5877-5882.	3.7	2
83	Effect of mechanical pressure on the adsorption-induced electrical conductivity of ferrocene. <i>Journal of Materials Science Letters</i> , 1992, 11, 35-37.	0.5	2
84	Effects of mechanical pressure on charge transport in some ferrocene derivatives in the presence of adsorbed vapours. <i>Journal of Materials Science</i> , 1994, 29, 4875-4882.	3.7	2
85	Contradicting Reports on Magnetic Properties of Layered Molecule-Based Material $N(n-C_3H_7)_4[FeIIFeIII(C_2O_4)_3]$ . <i>Chemistry of Materials</i> , 2003, 15, 2287-2287.	6.7	2
86	Uncompensated magnetization in the layered molecular antiferromagnet $\{N(n-C_5H_{11})_4[MnIIFeIII(ox)_3]\}_n$ . <i>Polyhedron</i> , 2009, 28, 2899-2904.	2.2	2
87	Electrical and magnetic characterization of a molecular material $\{[Ru(bpy)_3][Fe(dca)_3]_2\}_n$ . <i>Physica B: Condensed Matter</i> , 2011, 406, 4625-4629.	2.7	2
88	Calorimetric Study of Phase Transitions in 2D Bimetallic Molecular Magnetic Materials - $A[M(II)M(III)(C_2O_4)_3]_n$ . <i>Current Inorganic Chemistry</i> , 2014, 4, 19-30.	0.2	2
89	Comment on "multiple magnetic-pole reversals in the molecular-based mixed-valency ferrimagnet $\{[N(n-C_4H_9)_4][FeFe(C_2O_4)_3]\}_n$ " by G. Tang et al., <i>Physica B</i> 392 (2007) 337-340. <i>Physica B: Condensed Matter</i> , 2007, 399, 77-78.	2.7	1
90	Photo-Induced Spin State Switching In $[Fe(bpp)_2](NCS)_2 \cdot 2H_2O$ . <i>AIP Conference Proceedings</i> , 2010, , .	0.4	1

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91	Solid-State Thermal Reaction of a Molecular Material and Solventless Synthesis of Iron Oxide. International Journal of Thermophysics, 2016, 37, 1.	2.1	1
92	Analysis of Switching Ferrite Cores as Circuit Elements. IEEE Transactions on Component Parts, 1963, 10, 100-106.	0.2	0
93	Magnetic Properties of Mixed-Metal Compounds: $\text{NBu}_4\text{Coll}0.5\text{FeII}0.5[\text{MIll}(\text{ox})_3]$ , $\text{Bu}_4 = n\text{-(C}_4\text{H}_9)_4$ , $\text{M} = \text{Cr, Fe}$ . Physica Status Solidi A, 1999, 175, 683-691.	1.7	0
94	Mössbauer spectroscopy in molecular magnetism. , 2009, , 3-19.		0
95	Magnetic particulate matters in the ashes of few commonly used Indian cigarettes. Environmental Monitoring and Assessment, 2014, 186, 7399-7411.	2.7	0
96	Pressure Effect Studies on the High Spin $\leftrightarrow$ Low Spin Transition Behavior Observed in $[\text{Fe}(\text{II})(\text{bpp})_2](\text{NCS})_2 \cdot 2\text{H}_2\text{O}$ . Current Smart Materials, 2017, 2, .	0.5	0
97	A study on the electrical conduction in solid mixtures of PMMA and a molecular material. Chinese Journal of Physics, 2018, 56, 1467-1475.	3.9	0
98	Study on the Melting Mechanism of Maleic Anhydride. Current Physical Chemistry, 2020, 10, 65-78.	0.2	0
99	Structural, optical and dielectric studies of wurtzite-type CdS quantum dots green synthesised using Ocimum sanctum (Tulsi) leaf extract. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2021, 12, 035010.	1.5	0