

Chayan Das

List of Publications by Year in descending order

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34
papers

587
citations

471371

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h-index

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all docs

34
docs citations

34
times ranked

516
citing authors

#	ARTICLE	IF	CITATIONS
1	Rubber composites based on silane-treated silica and nitrile rubber. <i>Journal of Elastomers and Plastics</i> , 2015, 47, 248-261.	0.7	55
2	Ruthenium Complexes of 2-[(4-(Arylamino)phenyl)azo]pyridine Formed via Regioselective Phenyl Ring Amination of Coordinated 2-(Phenylazo)pyridine: Isolation of Products, X-ray Structure, and Redox and Optical Properties. <i>Inorganic Chemistry</i> , 2003, 42, 198-204.	1.9	53
3	Synthesis and chemical modification of crystalline nanocellulose to reinforce natural rubber composites. <i>Polymers for Advanced Technologies</i> , 2020, 31, 3059-3069.	1.6	48
4	Controlled Release of Metal Ion Cross-Linkers and Development of Self-Healable Epoxidized Natural Rubber. <i>ACS Applied Polymer Materials</i> , 2021, 3, 1190-1202.	2.0	35
5	Reinforcing efficiency and compatibilizing effect of sol-gel derived in situ silica for natural rubber/chloroprene rubber blends. <i>RSC Advances</i> , 2014, 4, 58816-58825.	1.7	27
6	Reinforced chloroprene rubber by in situ generated silica particles: Evidence of bound rubber on the silica surface. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	27
7	Metal-Promoted Aromatic Ring Amination and Deamination Reactions at a Diazo Ligand Coordinated to Rhodium and Ruthenium. <i>Inorganic Chemistry</i> , 2002, 41, 7125-7135.	1.9	26
8	Effect of sol-gel derived in situ silica on the morphology and mechanical behavior of natural rubber and acrylonitrile butadiene rubber blends. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 63, 501-509.	1.1	24
9	Isolation and characterization of ruthenium(II) and rhodium(I) complexes of 2-(arylamino)pyridine and studies of amine fusion reactions at the coordinated diazo-ligand. Electronic supplementary information (ESI) available: Fig. S1: ¹ H NMR spectra of 1a and tcc-[RuCl ₂ (HL1a) ₂] in CDCl ₃ . Inset: Methyl resonances of 1b. Fig. S2: ¹³ C NMR spectra of 1a and tcc-[RuCl ₂ (HL1a) ₂] in CDCl ₃ . Fig. S3: Cyclic voltammogram of 1a in CH ₃ CN. Fig. S4: Cyclic voltammogram of 2a in CH ₃ CN. See http://www.rsc.org/suppdata/doi/10.1039/B407209 . <i>Dalton Transactions</i> , 2004, . 2655.	1.6	23
10	Controlled growth of in situ silica in a NR/CR blend by a solution sol-gel method and the studies of its composite properties. <i>RSC Advances</i> , 2015, 5, 53559-53568.	1.7	22
11	Ruthenium complexes of quinone related N-aryl-1,2-diimines. Metal mediated synthesis, X-ray structure and chemical reaction. Electronic supplementary information (ESI) available: partial energy level diagram and molecular orbitals of 1c. See http://www.rsc.org/suppdata/nj/b2/b203956g/ . <i>New Journal of Chemistry</i> , 2002, 26, 1409-1414.	1.4	20
12	Compatibilization of natural rubber/nitrile rubber blends by sol-gel nano-silica generated by in situ method. <i>Journal of Sol-Gel Science and Technology</i> , 2016, 80, 548-559.	1.1	20
13	Development of highly reinforced acrylonitrile butadiene rubber composites via controlled loading of sol-gel titania. <i>Polymer</i> , 2017, 109, 25-37.	1.8	19
14	Effect of silane integrated sol-gel derived in situ silica on the properties of nitrile rubber. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	1.3	18
15	Osmium(II) complexes of 2-[(arylamido)phenylazo]pyridines. New examples of deamination reactions—X-ray structure and redox properties. Electronic supplementary information (ESI) available: partial energy level diagrams and molecular orbitals of 1a, 2a and 4a, UV-vis spectra of 4 complexes and cyclic voltammograms of 1b, 2b and 4b. See http://www.rsc.org/suppdata/nj/b1/b108507g/ . <i>New Journal of Chemistry</i> , 2002, 26, 222-228.	1.4	17
16	Incorporation of titania nanoparticles in elastomer matrix to develop highly reinforced multifunctional solution styrene butadiene rubber composites. <i>Polymer</i> , 2019, 162, 1-10.	1.8	17
17	In Situ Zirconia: A Superior Reinforcing Filler for High-Performance Nitrile Rubber Composites. <i>ACS Omega</i> , 2020, 5, 7751-7761.	1.6	17
18	Exploration of the ESIPT process in a newly designed potential bioactive thiosemicarbazone Schiff base: Spectroscopic analysis accompanied by molecular optimization and crystallographic study. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 371, 81-90.	2.0	15

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19	ESIPT reaction of potential bioactive heterocyclic Schiff base: Atomic visualization coupled with in vitro spectroscopy. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2016, 326, 41-49.	2.0	12
20	Studies on mechanical, rheological, thermal and morphological properties of <i>in situ</i> silica-filled butadiene rubber composites. <i>Plastics, Rubber and Composites</i> , 2018, 47, 345-351.	0.9	12
21	Transition Metal Promoted Oxidative C–N Fusion Reactions of Aromatic Amines and Their Coordination Chemistry. <i>Comments on Inorganic Chemistry</i> , 2003, 24, 137-163.	3.0	10
22	Development of multifunctional heterocyclic Schiff base as a potential metal chelator: a comprehensive spectroscopic approach towards drug discovery. <i>Journal of Biological Inorganic Chemistry</i> , 2017, 22, 47-59.	1.1	10
23	Development and characterization of graphitic carbon nitride as nonblack filler in natural rubber composites. <i>Journal of Applied Polymer Science</i> , 2019, 136, 48136.	1.3	10
24	FUNCTIONALIZATION OF EPDM RUBBER TOWARD BETTER SILICA DISPERSION AND REINFORCEMENT. <i>Rubber Chemistry and Technology</i> , 2019, 92, 219-236.	0.6	10
25	Synthesis, structure, redox and spectra of green iridium complexes of tridentate azo-aromatic ligands. <i>Journal of Chemical Sciences</i> , 2007, 119, 3-9.	0.7	9
26	Synthesis, structure and redox properties of isomeric [RuCl ₂ (L) ₂] (L=N-aryl-1,2-arylenediimine) complexes formed by the oxidative dimerization of coordinated aromatic amines. <i>Polyhedron</i> , 2002, 21, 97-104.	1.0	7
27	Enhancing the material performance of chloroprene rubber (CR) by strategic incorporation of zirconia. <i>Materials Advances</i> , 2022, 3, 2434-2446.	2.6	7
28	Physicochemical properties and in-vitro release study of CFLE-chitosan microsphere beads. <i>Journal of Polymer Research</i> , 2019, 26, 1.	1.2	5
29	Filler–filler and rubber–filler interactions in nitrile rubber/silica composites. <i>Emerging Materials Research</i> , 2014, 3, 46-51.	0.4	4
30	Electronic Applications of Chloroprene Rubber and Its Composites. <i>Springer Series on Polymer and Composite Materials</i> , 2016, , 279-304.	0.5	3
31	EXPLORING THE SUITABILITY OF SOL-GEL SYNTHESIZED NANO ZnO AS A CURE ACTIVATOR IN CARBON BLACK AND SILICA-FILLED NR COMPOSITES. <i>Rubber Chemistry and Technology</i> , 2020, , .	0.6	2
32	Highly efficient hydrotalcite-based adsorbent for aqueous-phase cationic dye removal: structural features, kinetics and isotherm study. <i>International Journal of Environmental Science and Technology</i> , 2023, 20, 565-578.	1.8	2
33	REINFORCEMENT EFFECT OF IN SITU DEVELOPED ITACONIC ACID BASED METAL SALT NANO-CRYSTALS IN ACRYLONITRILE-BUTADIENE COPOLYMER. <i>Rubber Chemistry and Technology</i> , 2021, 94, 462-475.	0.6	1
34	Transition Metal Promoted Oxidative C–N Fusion Reactions of Aromatic Amines and Their Coordination Chemistry. <i>ChemInform</i> , 2004, 35, no.	0.1	0