

List of Publications (*List of papers, book chapters, patents granted*).

Sl No.	Authors	Title	References
144	Swagata Sil, Athena Mandal, Balakumar Srinivasan, Paramita Datta, Partha Protim Dey, Pallabi Mandal, Sourav Banerjee, <u>Swadhin K. Mandal</u>	Organometallic-free Catalytic Cross-electrophilic Methylation of Aryl Halides	<i>J. Am. Chem. Soc.</i> 2026 , <i>148</i> , 36485–36498
143	Partha Protim Dey, Paramita Datta, Pallabi Mandal, Anex Jose, <u>Swadhin K. Mandal</u>	SO ₂ -Mediated 2e-, 4e- and 6e- Reductions: Facile Access to Aryl Amines	<i>Angew. Chem. Int. Ed.</i> 2026 , e3181079
142	Subir Maji, Sreejyothi P., Max M. Hansmann, <u>Swadhin K. Mandal</u>	Mesoionic N-Heterocyclic Olefins, Imines, Thiones, Phosphinidenes and Their Application in Catalysis	<i>Angew. Chem. Int. Ed.</i> 2026 , <i>65</i> , e20101 (2 of 17)
141	Amit Biswas, Simon Kolb, Swagata Sil, Debashis Manna, Sebastian H. Röttger, Anex Jose, Daniel B. Werz, <u>Swadhin K. Mandal</u>	Valorization of CO ₂ and N ₂ O Gas Enabled by a Single Multi-Photoinduced Electron Transfer Catalyst	<i>J. Am. Chem. Soc.</i> 2025 , <i>147</i> , 46187–46196
140	Debojyoti Roy, Paramita Datta, <u>Swadhin K. Mandal</u> , Jyotishman Dasgupta	Redox Umpolung of Phenalenyl-Based Molecule Inside Water-Soluble Nanocages	<i>J. Am. Chem. Soc.</i> 2025 , <i>147</i> , 43453–43461
139	Rohan Sharma, Sreejyothi Prasanna, Pralhad Shenoy, Nimisha Gautam, Biplab Gope, Subir Maji, Swapan Pati, <u>Swadhin K. Mandal</u>	Photoexcited Manganese Complex of Abnormal N-Heterocyclic Carbene in Molecular Hydrogen Activation via Hydrogen Atom Transfer Pathway	<i>ACS Catal.</i> 2025 , <i>15</i> , 19872–19882
138	Pallabi Mandal, Ratan Logdi, Subir Maji, <u>Swadhin K. Mandal</u> , Ashwani Tiwari	Quantum Chemical Insights of Mesoionic N-Heterocyclic Olefin Catalyzed S-Formylation of Thiols using CO ₂	<i>ACS Catal.</i> 2025 , <i>15</i> , 18688–18699
137	Biplab Gope, Nimisha Gautam, Satadru Dutta, Subir Maji, <u>Swadhin K. Mandal</u>	Coordination Chemistry of Phosphinidene Stabilized by Mesoionic N-heterocyclic Carbene and Catalysis	<i>Chem. Eur. J.</i> 2025 , <i>0</i> , e02402 (1 of 8)

136	Nimisha Gautam, Sreejyothi Prasanna, Kaushik Soni, Subhajit Chakraborty, Subir Maji, Kalishankar Bhattacharyya, <u>Swaihin</u> <u>K. Mandal</u>	aNHC Stabilised Low-Valent Phosphorus Compound: Exploring Dual Catalytic Activity via Nucleophilicity and P(I)/P(III) Redox Reactivity	<i>J. Am. Chem. Soc.</i> 2025, 147, 23001- 23013
135	Subir Maji, Mandira Saha, Satyaki Sinha, Priyankar Majumder, and <u>Swadhin K.</u> <u>Mandal</u>	Metal-Free Catalytic N- Methylation of NH- Sulfoximines Using CO ₂	<i>Org. Lett.</i> 2025, 27,4146–4151
134.	Paramita Datta, Subir Maji, Prativa Biswas, Divya Jain, Partha Protim Dey and <u>Swadhin</u> <u>K. Mandal</u>	Organophotocatalytic Redox- Neutral Strategy for Late-Stage Drug Functionalization with SO ₂ Gas	<i>Chem. Sci.</i> 2025, 16, 5064-5075

133.	Amit Biswas, Simon Kolb, Sebastian H. Rottger, Arpan Das, Lukas J. Patalag, Partha P. Dey, Swagata Sil, Subir Maji, Soumi Chakrabarty, Oliver S. Wenger, Anup Bhunia, Daniel B. Werz and <u>Swadhin K. Mandal</u>	ABOIMPY Dye Enables Multi-Photoinduced Electron Transfer Catalysis: Reaching Super-Reducing Properties	<i>Angew. Chem. Int. Ed.</i> 2025, 64, e202416472
132.	Subir Maji, Biplab Gope, Madhur Sharma, Arpan Das, Anex Jose, Amit Biswas, Kalishankar Bhattacharyya and <u>Swadhin K. Mandal</u>	Independent LUMO Reactivity in Mesoionic N-Heterocyclic Thiones: Synthesis of a Stable Radical Anion	<i>Angew. Chem. Int. Ed.</i> 2025, 64, e202418673
131.	Sreejyothi P, Nimisha Gautam, Subir Maji, Kalishankar Bhattacharyya and <u>Swadhin K. Mandal</u>	Transition Metal-Mimicking Relay Catalysis by a Low-Valent Phosphorus Compound	<i>J. Am. Chem. Soc.</i> 2024, 146, 16743–16752
130.	Swagata Sil, Krishnapriya Anattil Unnikrishnan, Pallabi Mandal, Rositha Kuniyil and <u>Swadhin K. Mandal</u>	Cross-coupling between Aryl Halides and Aryl Alkynes Catalyzed by an Odd Alternant Hydrocarbon	<i>Chem. Eur. J.</i> 2024, e202400895
129.	Arpan Das, Sukanta Saha, Subir Maji, Pallavi Sarkar, Anex Jose, Madhur Mahesh Bhatt, Anup Bhunia, Arnab Dutta, Swapan K. Pati, <u>Swadhin K. Mandal</u>	Highly Stable Self-Regenerating Organic Multi-Redox Systems derived from Bicyclic (Alkyl)(amino)carbenes (BICAACs)	<i>Chem. Eur. J.</i> 2024, e202303411

128. Subir Maji, Arpan Das, Madhur Mahesh Bhatt and <u>Swadhin K. Mandal</u>	Metal-Free Organocatalytic S-Formylation of Thiols using CO₂	<i>Nature Catalysis</i> 2024, 7, 375-385
---	--	---

127.	Paramita Datta, Debojyoti Roy, Divya Jain, Shiv. Kumar, Swagata Sil, Anup Bhunia, Jyotishman Dasgupta and <u>Swadhin K. Mandal</u>	Uncovering the On- pathway Reaction Intermediates for Metal- Free Atom Transfer Radical Addition to Olefins through Photogenerated Phenalenyl Radical Anion	<i>ACS Catalysis</i> 2024, 14 , 3420-3433
126.	Shiv Kumar, Paramita Datta, Anup Bhanja and <u>Swadhin K. Mandal</u>	Denitrogenation of Tosylhydrazones: Synthesis of Aryl Alkyl Sulfones Catalyzed by Phenalenyl Based Molecule	<i>Catal. Sci. Technol.</i> 2024, 14 , 174-182
125.	Nimisha Gautam, Ratan Logdi, Sreejyothi P, Antara Roy, Ashwani K. Tiwari and <u>Swadhin K. Mandal</u>	<i>Bicyclic (alkyl)(amino)carbo- ene (BICAAC) in Dual Role: Activation of Primary Amides and CO₂ towards Catalytic N- Methylation</i>	<i>Chemical Science</i> 2023, 14 , 5079-5086

124.	Paramita Datta, Tanmay Goswami, Noufal Kandoth, Ananya Banik, Jasimuddin Ahmed, Athul Santha Bhaskaran, Ramchandra Saha, Rositha Kuniyil, Hirendra N. Ghosh, <u>Swadhin Kumar</u> Mandal	<i>Generation of Photoinduced Phenalenyl-Based Radical: Towards Designing Reductive C-C Coupling Catalysis</i>	<i>ChemPhotoChem 2023, Just Accepted</i>
123.	Ananya Banik, Paramita Datta and <u>Swadhin K.</u> <u>Mandal</u>	<i>C-Alkylation by Phenalenyl-based Molecule via Borrowing Hydrogen Pathway</i>	<i>Organic Letters 2023, 25,8, 1305–1309</i>

122.	Amit Biswas, Anup Bhunia and <u>SwadhinK. Mandal</u>	<i>Mechanochemical Solid State Single Electron Transfer from Reduced Organic Hydrocarbon for Catalytic Aryl- halide Bond Activation</i>	<i>Chemical Science</i> 2023 , 14 , 2606-2615
121.	Soumi Chakraborty, Rounak Nath, AnujKumar Ray, Ankan Pauland <u>SwadhinK. Mandal</u>	<i>Metal-Ligand Cooperativity in Mn(I)-Catalyzed N-Formylation of SecondaryAmides and Lactams usingCO₂ at Room Temperature</i>	<i>Chem. Eur. J.</i> 2023 , 29 , e202202710(6 of 9)

120.	Swagata Sil, Athul Santha Bhaskaran, Soumi Chakraborty, Bhagat Singha, Rositha Kuniyil and Swadhin K. Mandal	<i>Reduced Phenalenyl Based Molecule as a Super Electron Donor for Radical Mediated C-N Coupling Catalysis at Room Temperature</i>	<i>J. Am. Chem. Soc.</i> 2022, 144, 49, 22611–22621
119.	Arpan Das, Pallavi Sarkar, Subir Maji, Swapan K. Pati and Swadhin K. Mandal	<i>Mesoionic N- Heterocyclic Imines as Super Nucleophiles in Catalytic Coupling of Amides by CO₂</i>	<i>Angew. Chem. Int. Ed.</i> 2022, 61, e202213614(1 of 10)

118.	Subir Maji, Pallavi Sarkar, Arpan Das, Swapan K. Pati and <u>Swadhin</u> <u>K. Mandal</u>	<i>Benzimidazolyliden e Stabilized Borenum Ion for Catalytic Hydrogenation of N-heterocycles</i>	<i>Inorg. Chem.</i> 2022 , <i>61</i> , 36 , 14282–14287
------	---	---	--

117.	Sreejyothi P, Pallavi Sarkar, Supriti Dutta, Arpan Das, Swapan K Pati and <u>Swadhin K Mandal</u>	<i>Regioselective ring-opening of epoxides towards Markovnikov alcohols: A metal-free catalytic approach using abnormal N-heterocyclic carbene</i>	<i>Chem. Commun.</i> , 2022, 58, 9540-9543
116.	Jasimuddin Ahmed and <u>Swadhin K. Mandal</u>	<i>Phenalenyl Radical: Smallest Polycyclic Odd Alternant Hydrocarbon Present in the Graphene Sheet</i>	<i>Chemical Reviews</i> 2022, 122, 13, 11369–11431
115.	Ananya Banik and <u>Swadhin K. Mandal</u>	<i>Tuning Redox States of Phenalenyl Based Molecule by Consecutive Reduction towards Transition Metal-Free Heck type C-C Cross-Coupling</i>	<i>ACS Catalysis</i> 2022, 12, 5000-5012
114.	Nimisha Gautam, Ratan Logdi, Sreejyothi P, N. M. Rajendran, Ashwani K. Tiwari and <u>Swadhin K. Mandal</u>	<i>Bicyclic (alkyl)(amino)carbene (BICAAC) as a metal-free catalyst for reduction of nitriles to amines</i>	<i>Chem. Commun.</i> 2022, 58, 3047-3050

113.	Soumi Chakraborty, ArpanDas , and <u>SwadhinK. Mandal</u>	<i>Redox-active Ligand BasedMn(I)-Catalyst for Hydrosilylative Ester Reduction</i>	<i>Chem. Commun.</i> 2021, 57, 12671- 12674
------	---	--	--

112.	Subir Maji, ArpanDas and <u>Swadhin K. Mandal</u>	<i>Mesoionic N-heterocyclic Olefin Catalysed Reductive Functionalization of CO₂ for Consecutive N-Methylation of Amines</i>	<i>ChemicalScience, 2021,12,12174-12180</i>
111.	Arpan Das, Soumi Chakrabortyand <u>Swadhin K. Mandal</u>	<i>Abnormal N-heterocyclic Carbene Based Ni(II) π-allyl Complex towards Molecular Oxygen Activation</i>	<i>Chemistry—An Asian Journal, 2021, 16, 2257–2260</i>
110.	Sreejyothi P, Kalishankar Bhattacharyya, Shiv Kumar, Pradip Kumar Hota, Ayan Datta and <u>Swadhin K. Mandal</u>	<i>An NHC-stabilized phosphinidene for catalytic formylation: ADFT guided approach</i>	<i>Chem.-Eur.J 2021, 27, 11656 –11662</i>
109.	Ananya Banik, Jasimuddin Ahmed, SwagataSil, <u>Swadhin K. Mandal</u>	<i>Mimicking Transition Metals in Borrowing Hydrogen from Alcohols</i>	<i>ChemicalScience, 2021,12, 8353-8361</i>
108.	Bhagat Singh, Jasimuddin Ahmed, Amit Biswas, RupankarPaira, and <u>Swadhin K. Mandal</u>	<i>Reduced Phenalenyl in Catalytic Dehalogenative Deuteration and Hydrodehalogenationof Aryl Halides</i>	<i>J. Org. Chem 2021, 86, 10, 7242–7255</i>

107.	N. M. Rajendran, Nimisha Gautam, Jasimuddin Ahmed, Pallavi Sarkar, Arpan Das, Shubhajit Das, Swapan K. Pati, <u>Swadhin K. Mandal</u>	<i>Bicyclic(alkyl)(amino)carbene stabilized zinc(0) complex and its electron transfer reactivity</i>	<i>Chem. Commun.</i> <i>2021, 57, 5282-5285</i>
106.	Jasimuddin Ahmed, Paramita Datta, Arpan Das, Stephy Jomy and <u>Swadhin K. Mandal</u>	<i>Switching between mono and doubly reduced odd alternant hydrocarbon: designing a redox catalyst</i>	<i>Chemical Science</i> <i>2021, 12, 3039-3049</i>

105.	Arpan Das, Jasimuddin Ahmed, N. M. Rajendran, Debashis Adhikari and <u>Swadhin K. Mandal</u>	<i>A Bottleable Imidazole- Based Radical as a Single Electron Transfer Reagent</i>	<i>J. Org. Chem.</i> 2021, 86, 1246– 1252
------	--	--	--

		<i>Novel Phenalenyl Based</i>	<i>New Journal of</i>
104.	Pradip Dutta, Smita Kumari, Justin Paulraj, Rupali Sharma, Gonela Vijaykumar, Hari Sankar Das, Prasannakumar	<i>Platinum Anticancer Compounds with Superior Efficacy: Design, Synthesis,</i>	<i>Chemistry,</i> 2021,45,10524- 10533

	Sreejyothi, Swagata Sil, <u>Swadhin K. Mandal</u> Aniruddha Sengupta, ArindamSarkar	<i>Characterization, and Interaction with NuclearDNA</i>	
103.	Ravindra Dhar Dubey, Arindam Sarkar, Zheyu Shen, Vladimir I. Bregadze, Igor B. Sivaev, Anna A. Druzina, Olga B. Zhidkova, Akim V. Shmal'ko, Irina D. Kosenko, Prasannakumar Sreejyothi, <u>SwadhinMandal</u> ,NarayanS. Hosmane	<i>Effects of linkers on the Development of Liposomal Formulation of Cholesterol Conjugated cobalt bis(dicarbollides) for Boron Neutron Capture Therapy in Cancer</i>	<i>Journal of Pharmaceutical Sciences 2021, 110, 1365-1373</i>
102.	SreejyothiP and <u>SwadhinK Mandal</u>	<i>From CO₂ Activation to CatalyticReduction: A Metal- free Approach</i>	<i>ChemicalScience 2020 11, 10571 - 10593</i>
101.	Soumi Chakraborty, Jasimuddin Ahmed, ArpanDas and <u>Swadhin K Mandal</u>	<i>Designing Cr-catalyst Bearing a Redox Non-innocent Phenalenyl-Based Ligand towards Hydrosilylative CO₂ Functionalization</i>	<i>Chem. Commun. 2020 56, 13788-13791</i>
100.	Vladimir I. Bregadze, Igor B. Sivaev, Andrey Semioshkin, Akim V. Shmal'ko, Irina D. Kosenko, Kseniya V. Lebedeva, <u>Swadhin K Mandal</u> , Prasannakumar Sreejyothi, Ravindra Dhar Dubey, ArindamSarkar, Zihou Li, Zheyu Shen, Aiguo Wu, NarayanS. Hosmane	<i>New Boron-Containing Lipids and Liposomes: Preparation and Properties</i>	<i>Chem. -Euro. J. 2020, 26, 13832- 13841</i>
99.	MrinalBhunia, Sumeet Ranjan Sahoo,Arpan Das, Jasimuddin	<i>Transition Metal-Free CatalyticReduction of Primary Amides Using an Abnormal</i>	<i>Chemical Science 2020, 11, 1848- 1854</i>

	Ahmed, Sreejyothi P. and <u>Swadhin K. Mandal</u>	<i>NHC based Potassium Complex: Integrating Nucleophilicity with Lewis Acidic Activation</i>	
98.	Samaresh Chandra Sau, Pradip Kumar Hota, <u>Swadhin K. Mandal</u> , Michele Soleilhavoup and Guy Bertrand	<i>Stable Abnormal N-Heterocyclic Carbenes and their Applications in Catalysis</i>	<i>Chem. Soc. Rev.</i> 2020, 49, 1233-1252
97.	Zheyu Shen, Ting Liu, Zhen Yang, Zijian Zhou, Wei Tang, Wenpei Fan, Yijing Liu, Jing Mu, Ling Li, Vladimir I Bregadze, <u>Swadhin K. Mandal</u> , Anna A Druzina, Zhenni Wei, Xiaozhong Qiu, Aiguo Wu, Xiaoyuan Chen	<i>Small-sized gadolinium oxide based nanoparticles for high-efficiency theranostics of orthotopic glioblastoma</i>	<i>Biomaterials</i>, 2020 119783.
96.	Mrinal Bhunia, Sreejyothi P and <u>Swadhin K. Mandal</u>	<i>Earth-abundant metal catalyzed hydrosilylative reduction of various functional groups</i>	<i>Coord. Chem. Rev.</i>, 2020, 405, 213110
95.	Pradip Kumar Hota, Subir Maji, Jasimuddin Ahmed, N. M. Rajendran and <u>Swadhin K. Mandal</u>	<i>NHC-catalyzed Silylative Dehydration of Primary Amides to Nitriles at Room Temperature</i>	<i>Chem. Commun.</i>, 2020, 56, 575-578
94.	Anna A. Druzina, Akim V. Shmal'ko, Ekaterina P. Andreichuk, Olga B. Zhidkova, Irina D. Kosenko, Andrey Semioshkin, Igor B. Sivaev, <u>Swadhin Mandal</u> , Zheyu Shen and Vladimir I. Bregadze	<i>'Click' synthesis of cobalt bis(dicarbollide)-cholesterol conjugates</i>	<i>Mendeleev Commun.</i>, 2019, 29, 628-630

93.	Jasimuddin Ahmed, Asim Kumar Swain, R. Govindarajan, Mrinal Bhunia and <u>Swadhin K. Mandal</u>	<i>Transition metal free catalytic terminal alkyne functionalization across the C-X triple bond (X = CH, N): E-Selective dimerization under ambient conditions</i>	<i>Chem. Commun.</i> 2019, 55, 13860-13863
92.	Govindarajan, R; Ahmed, Jasimuddin; Swain, Asim; <u>Swadhin K. Mandal</u>	<i>Transition Metal-Free Catalytic Carboalkoxylation of Styrenes at Room Temperature</i>	<i>J. Org. Chem.</i> 2019, 84, 13490-13502
91.	Hari S. Das, Shyamal Das, Kartick Dey, Bhagat Singh, Rahul K. Haridasan, Arpan Das and <u>Swadhin K. Mandal</u>	<i>Primary Amides to Amines or Nitriles: Dual Role by a Single Catalyst</i>	<i>Chem. Commun.</i> 2019, 55, 11868-11871
90.	Zheyu Shen, Wenpei Fan, Zhen Yang, Yijing Liu, Vladimir I Bregadze, <u>Swadhin K Mandal</u> , Bryant C Yung, Lisen Lin, Ting Liu, Wei Tang, Lingling Shan, Yuan Liu, Shoujun Zhu, Sheng Wang, Weijing Yang, L Henry Bryant, Duong T Nguyen, Aiguo Wu, Xiaoyuan Chen	<i>Exceedingly Small Gadolinium Oxide Nanoparticles with Remarkable Relativities for Magnetic Resonance Imaging of Tumors</i>	<i>Small</i>, 2019, 15, 1903422
89.	Arpan Das, Pradip Kumar Hota, and <u>Swadhin K. Mandal</u>	<i>Nickel Catalyzed C(sp²)-H Borylation of Arenes</i>	<i>Organometallics</i>, 2019, 38, 3286-3293
88.	Das, Shyamal; Das, Hari; Singh, Bhagat; Haridasan, Rahul; Das, Arpan; <u>Mandal, Swadhin</u>	<i>Catalytic Reduction of Nitriles by Polymethylhydrosiloxane Using a Phenalenyl Based Iron (III) Complex</i>	<i>Inorg. Chem.</i>, 2019, 58, 11274-11278

87.	Nimish Gupta, Aasif Ansari, Gaurao V Dhoke, MaheshwerreddyChilamari, Jwala Sivaccumar, Smita Kumari, Snigdha Chatterjee, Ravinder Goyal, Mallik Samarla, Madhumita Mukherjee, Arindam Sarkar, <u>Swadhin K Mandal</u> , Vishal Rai, Goutam Biswas, Aniruddha Sengupta, Monideepa Roy, Sudip Roy, Shiladitya Sengupta	<i>A Multivalent and Affinity-Guided Antibody Empowerment Technology (MAGNET) Platform to Engineer Antibody-Drug Conjugates for Targeting Cancer</i>	<i>Nature Biomed. Eng.</i> 2019,3,917–929
86.	Pradip Kumar Dutta, Rupali Sharma, Smita Kumari, Ravindra Dhar Dubey, Sujit Sarkar, Justin Paulraj, Gonela Vijaykumar, Manoj Pandey, L Sravanti, MallikSamarla, Hari Sankar Das, B Heeralal, Ravinder Goyal, Nimish Gupta, <u>Swadhin K Mandal</u> , AniruddhaSengupta, Arindam Sarkar	<i>A safe and efficacious Pt (ii) anticancer prodrug: design, synthesis, in vitro efficacy, the role of carrier ligands and in vivo tumor growth inhibition</i>	<i>Chem. Commun.</i> 2019, 55, 1718-1721
85.	MrinalBhunia; Sumeet Ranjan Sahoo; Bikash Kumar Shaw; Anand Pariyar; Gonela Vijaykumar; S. Vaidya; Debasish Adhikari; <u>Swadhin K. Mandal</u> .	<i>Storing Redox Equivalent in the Phenalenyl Backbone Towards Multielectron Reduction</i>	<i>Chemical Science</i> 2019, 10, 7433-7441
84.	GonelaVijaykumar; Mrinal Bhuniaa and <u>Swadhin K. Mandal</u>	<i>Phenalenyl-based Nickel CatalystforHydroboration of</i>	<i>Dalton Trans.,</i> 2019,48, 5779-5784

		<i>Olefins under Ambient Conditions</i>	
83.	Samaresh Chandra Sau; Rameswaran Bhattacharjee; Pavan K Vardhanapu; Pradip Kumar Hota; GVijaykumar; R. Govindarajan; Ayan Datta; <u>Swadhin K. Mandal.</u>	<i>Metal-Free Capture of CO₂ from Air and its Reduction into Alternative Fuel under Ambient Conditions</i>	<i>Chemical Science</i> 2019, 10, 1879-1884.
82.	Pavan Vardhanapu; Jasimuddin Ahmed; Anex Jose; Bikash Shaw; Tamal Sen; Amita Mathews; <u>Swadhin K. Mandal.</u>	<i>Phenalenyl based Aluminum Compound for Catalytic C-H Arylation of Arene and Heteroarenes at Room Temperature</i>	<i>J. Org. Chem.,</i> 2018, 84, 289-299.
81.	Pradip K. Hota; Samaresh C. Sau; <u>Swadhin K Mandal</u>	<i>Metal-Free Catalytic Formylation of Amides Using CO₂ under Ambient Conditions</i>	<i>ACS Cat.</i> 2018, 8, 11999-12003.
80.	Zheyu Shen, Ting Liu, Yan Li, Joseph Lau, Zhen Yang, Wenpei Fan, Zijian Zhou, Changrong Shi, Chaomin Ke, Vladimir IBregadze, <u>Swadhin K Mandal,</u> Yijing Liu, Zihou Li, Ting Xue, Guizhi Zhu, Jeeva Munasinghe, Gang Niu, Aiguo Wu, Xiaoyuan Chen	<i>Fenton-reaction-acceleratable magnetic nanoparticles for ferroptosis therapy of orthotopic brain tumors</i>	<i>ACS Nano,</i> 2018, 12, 11355-11365
79.	Bhagat Singh; Rupankar Paira; Goutam Biswas; Bikash K. Shaw; <u>Swadhin K Mandal</u>	<i>Graphene Oxide-Phenalenyl Composite: Transition Metal-Free Recyclable and Catalytic C- H Functionalization</i>	<i>Chem. Commun.</i> 2018, 54, 13220-13223.
78.	Soumi Chakraborty, Jasimuddin Ahmed, Bikash Kumar Shaw, Anex Jose, and <u>Swadhin K. Mandal.</u>	<i>Iron Based Long-Lived Catalyst for Direct C-H Arylation of Arenes and Heteroarenes</i>	<i>Chem. Eur. J.</i> 2018 24, 1-6.

77.	Sreejyothi P, Samaresh C. Sau, Pavan Vardhanapu, <u>Swadhin K Mandal</u>	<i>A Halobridged Abnormal NHC Palladium(II) Dimer for Catalytic Dehydrogenative Cross-Coupling Reactions of Heteroarenes</i>	<i>J. Org. Chem.</i> 2018, 83, 9403–9411
76.	Pavan Vardhanapu; Varun Bheemireddy; Mrinal Bhunia; Gonela Vijaykumar, <u>Swadhin K Mandal</u>	<i>Cyclic (Alkyl)amino Carbene Complex of Aluminum(III) in Catalytic Guanylation Reaction of Carbodiimides</i>	<i>Organometallics,</i> 2018, 37, 2602–2608.
75.	Jasimuddin Ahmed; Soumi Chakraborty; Anex Jose; <u>Swadhin K Mandal</u>	<i>Integrating Organic Lewis Acid and Redox Catalysis: The Phenalenyl Cation in Dual Role</i>	<i>J. Am. Chem. Soc.,</i> 2018, 140, 8330–8339.
74.	Ananya Banik, Rupankar Paira, Bikash Shaw, Gonela Vijaykumar and <u>Swadhin K Mandal</u>	<i>Accessing Heterobiaryls through A Transition Metal-Free C-H Functionalization</i>	<i>J. Org. Chem.</i> 2018, 83, 3236–3244.
73.	Anex Jose Gonela Vijaykumar, Vardhanapu, Pavankumar, and <u>Swadhin K Mandal</u>	<i>Abnormal NHC Supported Palladacycles: Regioselective Arylation of Heteroarenes via Decarboxylation</i>	<i>J. Organomet. Chem.</i> 2018, 865, 51–57
72.	Gonela Vijaykumar, Anand Pariyar, Jasimuddin Ahmed, Debashis Adhikari and <u>Swadhin K Mandal</u>	<i>Tuning Redox Non-innocence of Phenalenyl Ligand toward Efficient Base-Metal Assisted Catalytic Hydrosilylation</i>	<i>Chemical Science,</i> 2018, 9, 2817–2825.
71.	Gonela Vijaykumar, Anex Jose, Vardhanapu Pavankumar and <u>Swadhin K Mandal</u>	<i>Abnormal N-Heterocyclic Carbene Based Nickellacycles: Unprecedented Catalysts for Hydroheteroarylation of Vinyl Arenes</i>	<i>Organometallics,</i> 2017, 36, 4753–4758.
70.	Pradip Kumar Hota, Anex Jose and <u>Swadhin K Mandal</u>	<i>Abnormal NHC Based Palladium Complexes in Stereo- and Regioselective</i>	<i>Organometallics,</i> 2017, 36, 4422–4431.

<i>Addition of Arene to Alkyne: Elucidating the Role of Trifluoroacetic Acid</i>			
69.	Mrinal Bhunia, Gonela Vijaykumar, Debashis Adhikari, and <u>Swadhin K Mandal</u>	<i>Highly Active Carbene Potassium Complexes for the Ring-Opening Polymerization of Cyclic Esters</i>	<i>Inorg. Chem.</i> , 2017 , <i>56</i> , 14459-14466
68.	Jasimuddin Ahmed Sreejyothi P, Gonela Vijaykumar, Anex Jose, Manthan Raj and <u>Swadhin K Mandal</u>	<i>New Face of Phenalenyl Based Radical in Transition Metal Free C-H Arylation of Heteroarenes at Room Temperature: Trapping the Radical Initiator via C-Cσ Bond Formation</i>	<i>Chemical Science</i> , 2017 , <i>8</i> , 7798-7806
67.	Arup Mukherjee, Samaresh Chandra Sau and <u>Swadhin K Mandal</u>	<i>Exploring Closed-Shell Cationic Phenalenyl: From Catalysis to Spin Electronics</i>	<i>Acc. Chem. Res.</i> 2017 , <i>50</i> , 1679-1691.
66.	Jasimuddin Ahmed; Samaresh Ch. Sau; P. Sreejyothi, Pradip Kumar Hota; Pavan K Vardhanapu; <u>Swadhin K Mandal</u>	<i>Abnormal NHC Supported Palladium Catalyzed Direct C-H Arylation of Heteroarenes with Activated Aryl Chlorides</i>	<i>Eur. J. Org. Chem.</i> 2017 , 1004–1011
65.	Nimish Gupta, Jhony Kancharla; Shelly Kaushik; Aasif Ansari; Samad Hossain; Ravindar Goyal; Manoj Pandey; Jowala Sivaccumar; Sajid Hussain; Arindam Sarkar; Aniridhha Sengupta; <u>Swadhin K Mandal</u> ; Monideepa Roy; Shiladitya Sengupta	<i>Development of an antibody-drug conjugate platform using platinum as a linker</i>	<i>Chemical Science</i> , 2017 , <i>8</i> , 2387-2395

64.	Samaresh Ch. Sau; Rameswar Bhattacharjee; Pavan K. Vardhanapu; Gonela Vijaykumar; Ayan Datta; <u>Swadhin K Mandal</u>	<i>Metal Free Reduction of CO₂ to Methoxyborane Under Ambient Conditions through Borondiformate Formation</i>	<i>Angew. Chem. Int. Ed. 2016, 55, 15147–15151</i>
63.	Mrinal Bhunia; Sumeet Ranjan Sahoo; Gonela Vijaykumar; Debashis Adhikari; <u>Swadhin K Mandal</u>	<i>Iron Catalysed Regioselective Dimerization of Terminal Aryl Alkynes</i>	<i>Organometallics, 2016, 35, 3775– 3780</i>
62.	Mrinal Bhunia; Pradip Kumar Hota; Gonela Vijaykumar; Debashis Adhikari; <u>Swadhin K Mandal</u>	<i>A Highly Efficient Catalyst for Selective Reduction of Imines to Amines: An Abnormal- NHC–Fe(0) Complex in Reduction Chemistry</i>	<i>Organometallics, 2016, 35, 2930–2937</i>
61.	Gonela Vijaykumar; <u>Swadhin K Mandal</u>	<i>An Abnormal N-heterocyclic Carbene Nickel Catalyst for Reduction of Nitroarenes</i>	<i>Dalton Trans., 2016, 45, 7421– 7426</i>
60.	Rupankar Paira; Bhagat Singh; Pradip Kumar Hota; Jasimuddin Ahmed; Samresh Ch Sau; Justin Johnpeter; <u>Swadhin K Mandal</u>	<i>Phenalenyl Based Radical in Transition Metal Free Catalytic C-H Functionalization</i>	<i>J. Org. Chem. 2016, 81, 2432– 2441</i>
59.	Arunabha Thakur; Pavan K. Vardhanapu; Gonela Vijaykumar; Pradip Kumar Hota; <u>Swadhin K. Mandal</u>	<i>Abnormal N-Heterocyclic Carbene Mediated Capture of CO₂, N₂O and Activation of Small Molecules Under Ambient Condition</i>	<i>Eur. J. Inorg. Chem. 2016, 913– 920</i>
58.	Pradip Kumar Hota; Gonela Vijaykumar; Anand Pariyar; Samaresh Ch. Sau; Tamal Kumar Sen; <u>Swadhin K. Mandal</u>	<i>An Abnormal NHC Based Palladium Dimer: Aqueous Oxidative Heck Coupling Under Ambient Temperature</i>	<i>Adv. Synth. Catalysis 2015, 357, 3162–3170</i>

57.	AnandPariyar; Gonela Vijaykumar; SumanK. Dey; Santosh Kumar Singh; Sreekumar Kurungot; <u>Swadhin K Mandal</u>	<i>Switching Closed-Shell to Open-Shell Phenalenyl: TowardSwitching Closed-Shell to Open-Shell Phenalenyl: Toward Designing Electroactive Materials</i>	<i>J. Am. Chem. Soc.</i> 2015, 137, 5955- 5960
56.	Arup Mukherjee; TamalK Sen; Sambath Baskaran; CinnappanSivasankar; <u>Swadhin K. Mandal</u>		<i>J. Organomet. Chem.</i> 2015, 775, 76-79
55.	Sudipta Raha Roy; A. Nijamudheen; Anand Pariyar; Anup Ghosh; Pavan K. Vardhanapu; Prasun K. Mandal; AyanDatta; <u>Swadhin K. Mandal</u>	<i>Phenalenyl in Different Role: Catalytic Activation through the Nonbonding Molecular Orbital</i>	<i>ACSCatalysis</i> 2014, 4, 4307– 4319
54.	SudiptaRaha Roy; Samaresh Ch. Sau; <u>Swadhin K. Mandal</u>	<i>Chemoselective Reduction of the Carbonyl Functionality through Hydrosilylation: Integrating ClickReaction with Hydrosilylation in One Pot</i>	<i>J. Org. Chem.</i> 2014, 79, 9150- 9160.
53.	AbheekDatta;Anustup Sadhu; Subhankar Santra; S. M. Shivaprasad; <u>Swadhin K. Mandal</u> , Sayan Bhattacharyya	<i>Pd Nanoparticle Concentration Dependent Self-assembly of Pd@SiO₂ Nanoparticles into Leaching Resistant Microcubes</i>	<i>Chem. Commun.</i> 2014, 50, 10510-10512
52.	Arup Mukherjee; Prinson P Samuel; Carola Schulzke; <u>Swadhin K. Mandal</u>	<i>Main Group Chemistry of 9- Hydroxophenalenone: Syntheses and Structural Characterization of the Alkaline Earth and Zinc Complexes</i>	<i>J. Chem. Sci.</i> 2014, 126, 1581- 1588. (Invited)
51.	SamareshCh. Sau;Sudipta Raha Roy;	<i>Integrating Organometallic Catalysis with</i>	<i>Chem. Asian J</i>

	<u>Swadhin K. Mandal</u>	<i>Organocatalysis: A Consecutive Catalytic Approach in One-Pot</i>	2014, 9, 2806–2813.
50.	Ayan Patra; Gopal C. Giri; Tamal K. Sen; Luca Carrella; <u>Swadhin K. Mandal</u> ; Manindranath Bera	<i>Bis(μ-alkoxo) bridged dinuclear CuII₂ and ZnII₂ complexes of an isoindol functionality based new ligand: synthesis, structure, spectral characterization, magnetic properties, and catechol oxidase activity</i>	<i>Polyhedron</i> 2014, 67, 495–504.
49.	Arup Mukherjee; Tamal K. Sen; Pradip K. Ghorai; <u>Swadhin K. Mandal</u>	<i>Organozinc Catalyst on Phenalenyl Scaffold for Intramolecular Hydroamination of Aminoalkenes</i>	<i>Organometallics</i> 2013, 32, 7213–7224
48.	Subhankar Santra; Pradip Kumar Hota; Rangeet Bhattacharyya; Parthasarathi Bera; Prasenjit Ghosh; <u>Swadhin K. Mandal</u>	<i>Palladium Nanoparticles on Graphite Oxide: Highly Recyclable Catalyst for the Synthesis Biaryl Cores</i>	<i>ACS Catalysis</i>, 2013, 3, 2776–2789
47.	Arup Mukherjee; Tamal K. Sen; Pradip K. Ghorai; <u>Swadhin K. Mandal</u>	<i>The Non-innocent Phenalenyl Unit: An Electronic Nest to Modulate the Catalytic Activity in Hydroamination Reaction</i>	<i>Scientific Reports</i> 2013, 3, 2821 (DOI:10.1038/srep02821)
46.	Samaresh Ch. Sau; Sudipta Raha Roy; Tamal K. Sen; Dinesh Mullangi; <u>Swadhin K. Mandal</u>	<i>An Abnormal N-Heterocyclic Copper(I) Complex in Versatile Click Chemistry</i>	<i>Adv. Synth. Cat.</i> 2013, 355, 2982–2991.
45.	Tamal K. Sen; Samaresh Ch. Sau; Arup Mukherjee; Pradip Kumar Hota; <u>Swadhin K</u>	<i>Abnormal N-heterocyclic Carbene Main Group Organometallic Chemistry: A</i>	<i>Dalton Trans.</i> 2013, 42, 14253–14260

	<u>Mandal</u> ;Bholanath Maity; Debasish Koley	<i>Debut to the Homogenous Catalysis</i>	
44.	TanmoyChakraborty; Tamal K. Sen; Harkirat Singh; DiptaranjanDas; <u>Swadhin K. Mandal</u> ; Chiranjib Mitra	<i>Experimental Realization of Thermal Entanglement in a Molecular chain</i>	<i>J. Appl. Phys.</i> 2013, 114, 144904.
43.	Ayan Patra; Tamal K. Sen; Ghezai T. Musie; <u>Swadhin K. Mandal</u> ; Manindranath Bera	<i>A novel copper(II) coordinationpolymer with carboxylate and isoindol backbonesofabifunctional ligand</i>	<i>J. Mol. Struc.</i> 2013, 1047, 317- 323.
42.	AyanPatra; TamalKumar Sen; Atanu Ghorai; Ghezai T Musie; <u>Swadhin K Mandal</u> ; Utpal Ghosh; Manindra Bera	<i>Synthesis, Structure, Spectroscopic Characterization and Protein Binding Affinity of New Water Soluble Hetero- andHomometallic Tetranuclear [CuII₂ZnI₂] and [CuII₄] Clusters</i>	<i>Inorg. Chem.</i> 2013, 52, 2880– 2890
41.	Tamal Kumar Sen; Arup Mukherjee;ArghyaModak; <u>Swadhin K Mandal</u> ; BholanathMaity, Debasish Koley	<i>Substitution Effect on Phenalenyl Backbone in the RateofOrganozincCatalyzed ROP of Cyclic Esters</i>	<i>Dalton Trans.</i> 2013, 42, 1893- 1904
40.	Arup Mukherjee; Tamal K. Sen; <u>Swadhin K Mandal</u> ; Bholanath Maity; Debasish Koley	<i>Construction of Oxygen- bridged Multimetallic Assembly: Dual Catalystsfor Hydroamination Reactions</i>	<i>RSC Advances</i> 2013, 3, 1255– 1264
39.	KarthikV. Raman, Alexander M. Kamerbeek, Arup Mukherjee, Nicolae Atodiresei, Tamal K. Sen, Predrag Lazić, Vasile Caciuc, Reent Michel, Dietmar Stalke, <u>Swadhin K.</u>	<i>Interface-engineered templates for molecular spin memory devices</i>	<i>Nature</i> , 2013, 493, 509–513

	<u>Mandal</u> ,Stefan Blügel, Markus Münzenberg, JagadeeshS. Moodera		
38.	Tanmoy Chakraborty; DiptaranjanDas; Harkirat Singh;Tamal K. Sen; <u>Swadhin K. Mandal</u> ; Chiranjib Mitra	<i>Studyof Entanglement in a Quantum Antiferromagnet</i>	<i>AIP Conf. Proceed. 1447, 2012, 1145- 1146.</i>
37.	Tanmoy Chakraborty; DiptaranjanDas; Harkirat Singh;Tamal K. Sen; <u>Swadhin K. Mandal</u> ; Chiranjib Mitra	<i>Comparativestudyof magnetic behaviour in three classic molecular magnets</i>	<i>Solid State Commun.2012, 152, 1945-1950.</i>
36.	Suman Kr Dey; Andreas Honecker; Partha Mitra; <u>SwadhinK.Mandal</u> ; Arindam Mukherjee	<i>Magneto-structural studies of tetranuclear manganese [MnIII2MnII2] complexes of 9- hydroxy phenalene with weak π-π interactions</i>	<i>Eur. J. Inorg. Chem.2012,5814- 5824.</i>
35	AyanPatra; TamalK. Sen; Rangeet Bhattacharyya; <u>Swadhin K. Mandal</u> ; Manindranath Bera	<i>Diversity of carboxylate binding in an unusual tetranuclear zinc cluster: Correlation between spectroscopic investigations and carboxylate binding modes</i>	<i>RSC Advances 2012, 2, 1774- 1777.</i>
34.	Subhankar Santra; Praiyadarshi Ranjan; Parthasarathi Bera; Prasenjit Ghosh; <u>Swadhin K. Mandal</u>	<i>Anchored palladium nanoparticles onto single walled carbon nanotubes: Recyclable heterogeneous nanocatalyst in the synthesis of N-containing heterocycles via copper free acyl Sonogashira reaction</i>	<i>RSC Advances 2012, 2, 7523– 7533</i>

33.	Arup Mukherjee; Tamal K. Sen; Pradip Kr. Ghorai; Prinson P. Samuel; Carola Schulzke; <u>Swadhin K. Mandal</u>	<i>Phenalenyl Based Organozinc Catalysts for Intramolecular Hydroamination Reactions: A Combined Catalytic, Kinetics and Mechanistic Investigation on the Catalytic Cycle</i>	<i>Chem. Eur. J., 2012, 18, 10530-10545 (Highlighted with Frontispiece Graphics)</i>
32.	Tamal Kumar Sen; Arup Mukherjee; Arghya Modak; Pradip Kr. Ghorai; Daniel Kratzert; Markus Granitzka; Dietmar Stalke; <u>Swadhin K. Mandal</u>	<i>Phenalenyl Based Molecules: Tuning the Lowest Unoccupied Molecular Orbital to Design Catalyst</i>	<i>Chem. Eur. J. 2012, 18, 54-58</i>
31.	Samaresh Ch. Sau; Subhankar Santra; Tamal K. Sen; <u>Swadhin K. Mandal</u> ; Bholanath Maity; Debasish Koley	<i>Abnormal N-Heterocyclic Carbene Palladium Complex: Living Catalyst for Activation of Aryl Chlorides in Suzuki–Miyaura Cross Coupling</i>	<i>Chem. Commun. 2012, 48, 555-557. (Listed among “Most Read Articles” published by Chemical Communications during the first week of its publication.)</i>
30.	<u>Swadhin K. Mandal</u> and Herbert Roesky	<i>Group 14 Hydrides with Low-Valent Elements for Small Molecules Activation</i>	<i>Acc. Chem. Res. 45, 2012, 298-307</i>
29.	Diptaranjan Das; Tanmoy Chakraborty; Harkirat Singh; Tamal K. Sen; <u>Swadhin K. Mandal</u> ; Chiranjib Mitra	<i>Experimental quantification of entanglement in quantum spin systems</i>	<i>AIP Conf. Proceed. 2011, 1384, 261–269.</i>

28.	TamalKumar Sen; Samaresh Ch. Sau; Arup Mukherjee; Arghya Modak; <u>Swadhin K. Mandal</u> ; Bholanath Maity; Debasish Koley	<i>Introduction of Abnormal N-Heterocyclic Carbene as an Efficient Organocatalyst: Ring Opening Polymerization of Cyclic Esters</i>	<i>Chem. Commun.</i> 2011, 47, 11972–11974.
27.	Subhankar Santra; Kalyan Dhara; Priyadarshi Ranjan; Parthasarathi Bera; Jatirmayee Dash; <u>Swadhin K. Mandal</u>	<i>Supported Palladium Nanocatalyst for Copper free Acyl Sonogashira Reactions: One-Pot Multicomponent Synthesis of N-containing Heterocycles</i>	<i>Green Chem.</i> 2011, 13, 3238 – 3247
26.	Subhankar Santra; Priyadarshi Ranjan; Pradip Kr. Ghorai; <u>Swadhin K. Mandal</u>	<i>Living Nanocatalyst for Effective Synthesis of Symmetrical Biaryls</i>	<i>Inorg. Chim. Acta</i> 2011, 372, 47–52. (Invited article)
25.	Arup Mukherjee; Tamal K. Sen; <u>Swadhin K. Mandal</u> ; Daniel Kratzert; Dietmar Stalke; Alexander Doering; Carola Schulzke	<i>Phenalenyl Based Ligand for Transition Metal Chemistry: Application in Henry Reaction</i>	<i>J. Chem. Sci.</i> 2011, 123, 139–144. (Invited article)
24.	Gregor P. Jose; Subhankar Santra; <u>Swadhin K. Mandal</u> ; Tapas K Sengupta	<i>Singlet Oxygen Mediated DNA Degradation by Copper Nanoparticles</i>	<i>J. Nanobiotechnology</i> 2011, 9, 9
23.	Arup Mukherjee; Sharanappa Nembenna; TamalKumar Sen; S. P. Sarish; Pradip K Ghorai; Ott, H.; Dietmar Stalke; <u>Swadhin K Mandal</u> ; Herbert W. Roesky	<i>Assembling Zirconium and Calcium Moieties through an Oxygen Center for Intramolecular Hydroamination Reaction: A Single System for Double Activation</i>	<i>Angew. Chem. Int. Ed.</i> 2011, 50, 3968-3972
22.	<u>Swadhin K Mandal</u> , and Herbert W Roesky	<i>Interstellar Molecules: Guides for New Chemistry</i>	<i>Chem. Commun.</i> 2010, 46, 6016-6041

21.	<u>Swadhin K Mandal</u> , and Herbert W Roesky	<i>Assembling Hetero Metals Through Oxygen: An Efficient Way to Design Homogeneous Catalysts</i>	<i>Acc. Chem. Res.</i> 2010, 43, 248–259
20.	Irina Kalinina; Kimberly Worsley; Christopher Lugo; <u>Swadhin Mandal</u> ; Elena Bekyarova; Robert CHaddon	<i>Dispersion and Viscosity of Water-Soluble Single-Walled Carbon Nanotube Materials Functionalized with Polyethylene- Glycols</i>	<i>Chem. Mat.</i> 2011, 23, 1246–1253.
19.	<u>Swadhin K Mandal</u> ; Prabhuodeyara Gurubasavaraj; Herbert W. Roesky; Gerald Schwab; Dietmar Stalke; Rainer BOswald; Volker Dolle	<i>Oxygen Bridged Hybrid Metallocene-Nonmetallocene Polymetallic Catalysts of Group 4 Metals for Bimodal Activity in Olefin Polymerization: Synthesis, Characterization, and Theoretical Investigation</i>	<i>Inorg. Chem.</i> 2007, 46, 10158– 10168
18.	<u>Swadhin K. Mandal</u> ; Prabhuodeyara M Gurubasavaraj; Herbert W. Roesky; Rainer B Oswald; Juerg Magull; Arne Ringe	<i>Synthesis, Structural Characterization, and Theoretical Investigation of Compounds Containing an Al– O–M–O–Al (M = Ti, Zr) Core</i>	<i>Inorg. Chem.</i> 2007, 46, 7594– 7600
17.	Kimberely A Worsley; Ramesh, P.; <u>Swadhin K</u> <u>Mandal</u> ; Sandip Niyogi; Mikhayl E. Itkis; Robert C Haddon	<i>Soluble Graphene Derived from Graphite Fluoride</i>	<i>Chem. Phys. Lett.</i> 2007, 445, 51–56
16.	Thengarai S. Venkatakrishnan; <u>Swadhin K Mandal</u> ; Kannan Raghuraman; Setharampattu S. Krsihnamurthy; Munirathinam Nethaji	<i>Chloro-, Hydrido- and Chloro- hydrido Ruthenium(II) complexes of Chiral and Achiral Diphosphazane Ligands and Catalytic Asymmetric Transfer</i>	<i>J. Organomet.</i> <i>Chem.</i> 2007, 692, 1875–1891.

<i>Hydrogenation reactions using Chiral Diphosphazane Ligands</i>			
15.	Leanne Beer; Swadhin K. Mandal ; Fook S Tham; Bruno Donnadieu; Robert W Reed; Richard T Oakley; Robert C. Haddon	<i>The First Electronically Stabilized Phenalenyl Based Radical: The Effect of Chalcogen Substituents on Solid State Structures</i>	<i>Cryst. Growth & Des.</i> 2007, 7, 802–809.
14.	Prabhuodeyara M Gurubasavaraj; Swadhin K Mandal ; Herbert W. Roesky; Rainer B Oswald; Aritra Pal; Mathias Noltemeyer	<i>Synthesis, Characterization, Catalytic Properties, and Theoretical Study of Compounds Containing an Al–O–M (M = Ti, Hf) Core</i>	<i>Inorg. Chem.</i> 2007, 46, 1056–1061. (Listed in Most cited articles in Inorganic Chemistry for the year –2007.)
13	G. A. Jorge; K. H. Kim; M. Jaime; X. Chi; F. Hellman; M. E. Itkis; S. Mandal ; R. C. Haddon	<i>Dimerization Transition in Phenalenyl-based Neutral Radicals Measured at High Magnetic Fields</i>	<i>AIP Conf. Proceed.</i> 2006, 850, 1315–1316.
12.	Sharanappa Nembenna; Herbert W Roesky; Swadhin K Mandal ; Rainer B Oswald; Aritra Pal; Regine Herbst-Irmer; Mathias Noltemeyer; Hans-Georg Schmidt	<i>Soluble Molecular Compounds with the Mg–O–Al Structural Motif – A Model Approach for the Fixation of Organometallics on a MgO Surface</i>	<i>J. Am. Chem. Soc.</i> 2006, 128, 13056–13057
11.	Swadhin K Mandal ; Thengarai S. Venkatakrishnan; Arindam Sarkar; Setharampattu S. Krishnamurthy	<i>Steric and Electronic Factors in the Stability of Palladium Allyl Complexes with Diphosphazane Ligands</i>	<i>J. Organomet. Chem.</i> 2006, 691, 2969–2977.
10.	Swadhin K. Mandal ; Satyabrata Samanta; Dell W Jensen; Mikhail Itkis; Bruno Donnadieu; Fook S Tham;	<i>The Resonating Valence Bond Ground State in Oxygen Functionalized Phenalenyl Based Molecular Conductors</i>	<i>J. Am. Chem. Soc.</i> 2006, 128, 1982–1994.

	Robert W Reed; Richard T Oakley; Robert C. Haddon		
9.	BinZhao; HuiHu; Swadhin K Mandal ; Robert C. Haddon	<i>A Bone Mimic Based on the Self Assembly of Hydroxyapatite on Chemically Functionalized Single-Walled Carbon Nanotubes</i>	Chem. Mat. 2005, 17, 3235–3241. (Selected by <i>Discover Magazine</i> among 100 best discovery of the year, placed as eighth most important discovery in the list of 100)
8.	Swadhin K. Mandal ; Mikhail E Itkis, Xiaoliu Chi; Satyabrata Samanta; David Lidsky; Fook S Tham; Robert W Reed; Richard T Oakley; Robert C. Haddon	<i>New Family of Amino-Phenalenyl-Based Neutral Radical Molecular Conductors: Synthesis, Structure, and Solid State Properties</i>	J. Am. Chem. Soc. 2005, 127, 8185–8196.
7.	Hui Hu; Yingchun Ni; Swadhin K Mandal ; Vedrana Montana; BinZhao; Robert C. Haddon; Vladimir Parpura	<i>Polyethylenimine Functionalized Single-Walled Carbon Nanotubes as a Substrate for Neuronal Growth</i>	J. Phys. Chem. B 2005, 109, 4285–4289.
6.	Swadhin K Mandal ; G. A. Nagana Gowda; Setharampattu S. Krishnamurthy; Thomas Stey; Dietmar Stalke	<i>Chiral “P-N-P” Ligands, (C₂₀H₁₂O₂)PN(R)PY₂ (R = CHMe₂, Y = C₆H₅, OC₆H₅, OC₆H₄-4-Me, OC₆H₄-4-OMe or OC₆H₄-4-tBu) and their Allyl Palladium Complexes</i>	J. Organomet. Chem. 2005, 690, 742–750
5.	Swadhin K Mandal ; G A Nagana Gowda; Setharampattu S Krishnamurthy; Munirathinam Nethaji	<i>Palladium(II) Allyl Complexes of Chiral Diphosphazane Ligands: Ambident Coordination</i>	Dalton Trans. 2003, 1016–1027

		<i>Behaviour and Stereodynamic Studies in Solution</i>	
4.	<u>Swadhin K Mandal</u> ; G A Nagana Gowda; Setharampattu S Krishnamurthy; Chong Zheng; Shoujian Li; Narayan S Hosmane	<i>Diastereomerism in Palladium(II) Allyl Complexes of P,P-, P,S- and S,S-donor Ligands, Ph₂P(E)N(R)P(E') Ph₂ [R = CHMe₂ or (S)-CHMePh; E = E' = lone pair or S]; Solution Behaviour, X-ray Crystal Structure and Catalytic Allylic Alkylation Reactions</i>	<i>J. Organomet. Chem.</i> 2003 , <i>676</i> , 22–37
3.	<u>Swadhin K Mandal</u> ; Setharampattu S Krishnamurthy; Munirathinam Nethaji	<i>Palladium-Carbon Bonded Complexes Bearing Diphosphazane and Diphosphazane Monosulfide Ligands</i>	<i>Ind. J. Chem.</i> 2003 , <i>42A</i> , 2422–2426
2.	Kannan Raghuraman; <u>Swadhin K Mandal</u> ; Thengarai S Venkatakrishnan; Setharampattu S Krishnamurthy; Munirathinam Nethaji	<i>Organometallic Chemistry of Chiral Diphosphazane Ligands: Synthesis and Structural Characterisation</i>	<i>Ind. Acad. Sci., Chem. Sci.</i> 2002 , <i>114</i> , 233–246
1.	<u>Swadhin K Mandal</u> ; G A Nagana Gowda; Setharampattu S Krishnamurthy; Chong Zhen; Shoujuan Li; Narayan S Hosmane	<i>Allylpalladium Complexes of Mixed-Donor Diphosphazane Ligands Bearing a Stereogenic Phosphorus Centre: Structure and Stereodynamics</i>	<i>Eur. J. Inorg. Chem.</i> 2002 , <i>8</i> , 2047–2056

Book Chapter

Swadhin K. Mandal and Herbert W. Roesky “Designing Molecular Catalysts Based on Enhanced Lewis Acidity” *Adv. Cat.* **54**, 2011, 1- 61, Editors: Bruce C. Gates (Series Editor), Helmut Knoezinger (Series Editor), Friederike C. Jentoft (Series Editor), academic press.

Patents Granted

Patent Name	Patent Holders	Year	Indian Application/International Application No.	International ApplicationNo.
Abnormal N-heterocyclic Carbene Copper(1) Complexes, Synthesis and Applications Thereof	Mandal, S. K. and Sau, S. Ch.	2013	IndianPatent Application No. 1042/KOL/2013 (Filed on: 06/09/2013)	IndianPatent No. 338890; Granted on: 19/06/2020
LipidBasedPlatinum N- heterocyclic Compounds and Nanoparticles	Sarkar, A.; Mandal, S. K.	2014	US2016/0122377	US Patent No 10017531, Granted on 10 th July, 2018