Liudmil Antonov

List of Publications by Year
in descending order

127 papers	3,679 citations	147801 31 h-index	155660 55 g-index
159 all docs	159 docs citations	159 times ranked	3525 citing authors

#	Article	IF	Citations
1	UVâ€“Vis spectroscopic and chemometric study on the aggregation of ionic dyes in water. Talanta, 1999, 49, 99-106.	5.5	226
2	The effect of the water on the curcumin tautomerism: A quantitative approach. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 132, 815-820.	3.9	164
3	Tautomerism in Hydroxynaphthaldehyde Anils and Azo Analogues:â€‰a Combined Experimental and Computational Study. Journal of Physical Chemistry A, 2004, 108, 7603-7612.	2.5	151
4	Resolution of overlapping UVâ€“Vis absorption bands and quantitative analysis. Chemical Society Reviews, 2000, 29, 217-227.	38.1	143
5	Î²-Galactosyl Yariv Reagent Binds to the Î²-1,3-Galactan of Arabinogalactan Proteins Â Â. Plant Physiology, 2013, 161, 1117-1126.	4.8	142
6	Tautomerism of 2-hydroxynaphthaldehyde Schiff basesâ€Šâ€. Perkin Transactions II RSC, 2000, , 1173-1179.	1.1	132
7	Thioneâ€“thiol tautomerism and stability of 2- and 4-mercaptopyridines and 2-mercaptopyrimidines. Canadian Journal of Chemistry, 1990, 68, 1482-1489.	1.1	129
8	Variable-Temperature X-ray Crystallographic and DFT Computational Study of the NHÂ·Â·Â·O/NÂ·Â·Â·HO Tautomeric Competition in 1-(Arylazo)-2-naphthols. Outline of a Transiton-State Hydrogen-Bond Theory. Journal of the American Chemical Society, 2005, 127, 4943-4953.	13.7	129
9	A systematic femtosecond study on the two-photon absorbing D-Ï€-A moleculesâ€“Ï€-bridge nitrogen insertion and strength of the donor and acceptor groups. Physical Chemistry Chemical Physics, 2003, 5, 1193-1197.	2.8	126
10	Excited state intramolecular proton transfer in some tautomeric azo dyes and schiff bases containing an intramolecular hydrogen bond. Journal of Photochemistry and Photobiology A: Chemistry, 2002, 152, 183-191.	3.9	113
11	Excited-State Intramolecular Proton Transfer: A Short Introductory Review. Molecules, 2021, 26, 1475.	3.8	101
12	Theoretical study of the two-photon absorption properties of several asymmetrically substituted stilbenoid molecules. Journal of Chemical Physics, 2007, 127, 084504.	3.0	79
13	Solvent Effects on the Second-Order Nonlinear Optical Responses in the Ketoâ^'Enol Equilibrium of a 2-Hydroxy-1-naphthaldehyde Derivative. Journal of Physical Chemistry C, 2010, 114, 12760-12768.	3.1	63
14	Exploiting Tautomerism for Switching and Signaling. Angewandte Chemie - International Edition, 2009, 48, 7875-7878.	13.8	62
15	Temperature dependent absorption spectroscopy of some tautomeric azo dyes and Schiff bases. Perkin Transactions II RSC, 2001, , 2303-2308.	1.1	59
16	Analysis of the Overlapping Bands in UV-Vis Absorption Spectroscopy. Applied Spectroscopy, 1993, 47, 1030-1035.	2.2	57
17	Crystal structures, binding interactions, and ADME evaluation of brain penetrant N -substituted indazole-5-carboxamides as subnanomolar, selective monoamine oxidase B and dual MAO-A/B inhibitors. European Journal of Medicinal Chemistry, 2017, 127, 470-492.	5.5	50
18	Quantitative analysis of azo-quinonehydrazone tautomeric equilibrium. Dyes and Pigments, 1989, 10, 33-45.	3.7	47

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19	Ab initio modeling of the solvent influence on the azo-hydrazone tautomerism1Dedicated to Professor Dr. T. Iijima for his contribution to dye chemistry.1. Dyes and Pigments, 1999, 40, 163-170.	3.7	47
20	Chemometric Models For Quantitative Analysis of Tautomeric Schiff Bases and Azo Dyes. Current Organic Chemistry, 2009, 13, 217-240.	1.6	47
21	Interplay between conformational and solvent effects in UV-visible absorption spectra: curcumin tautomers as a case study. Physical Chemistry Chemical Physics, 2019, 21, 15504-15514.	2.8	47
22	Description of the Tautomerism in Some Azonaphthols. Journal of Physical Organic Chemistry, 2013, 26, 643-652.	1.9	44
23	Tautomeric equilibrium in 1-phenylazo-2-naphtholâ€"A quantitative study. Dyes and Pigments, 1995, 27, 133-142.	3.7	43
24	Azo-quinonehydrazone tautomerism in 2-phenylazo-1-naphthol. Dyes and Pigments, 1995, 28, 31-39.	3.7	43
25	Tautomeric transformations of piroxicam in solution: a combined experimental and theoretical study. RSC Advances, 2015, 5, 31852-31860.	3.6	37
26	Tautomerism in some aromatic Schiff bases and related azo compounds: an LSER study. Journal of Physical Organic Chemistry, 2005, 18, 1169-1175.	1.9	36
27	Theoretical investigations on the tautomerism of 1-phenylazo-4-naphthol and its isomers. Dyes and Pigments, 1998, 38, 157-164.	3.7	34
28	Resolution of overlapping UV-visible absorption bands: Quantitative analysis of tautomeric equilibria. Analytica Chimica Acta, 1995, 314, 225-232.	5.4	33
29	Twoâ€Photon Absorption Properties of Dehydrobenzo[12]annulenes and Hexakis(phenylethynyl)benzenes: Effect of Edgeâ€Linkage. ChemPhysChem, 2007, 8, 2671-2677.	2.1	33
30	Tautomerism in 1-phenylazo-4-naphthols: Experimental results vs quantum-chemical predictions. Dyes and Pigments, 2012, 92, 714-723.	3.7	33
31	Chemical profiling of Bulgarian rose absolute (Rosa damascena Mill.) using gas chromatographyâ€"mass spectrometry and trimethylsilyl derivatives. Industrial Crops and Products, 2017, 108, 36-43.	5.2	33
32	Drawbacks of the present standards for processing absorption spectra recorded linearly as a function of wavelength. TrAC - Trends in Analytical Chemistry, 1997, 16, 536-543.	11.4	32
33	Quantitative analysis of undefined mixtures - "fishing net" algorithm. Analytical and Bioanalytical Chemistry, 2002, 374, 1312-1317.	3.7	32
34	Tautocrowns: a concept for a sensing molecule with an active side-arm. Tetrahedron, 2010, 66, 4292-4297.	1.9	32
35	Hybrid liposomal PEGylated calix[4]arene systems as drug delivery platforms for curcumin. International Journal of Pharmaceutics, 2014, 472, 165-174.	5.2	31
36	Tautomerism in Azo and Azomethyne Dyes: When and If Theory Meets Experiment. Molecules, 2019, 24, 2252.	3.8	31

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37	Favipiravir tautomerism: a theoretical insight. Theoretical Chemistry Accounts, 2020, 139, 145.	1.4	31
38	Quantitative analysis of tautomeric equilibrium in 1-phenylazo-4-naphtholsâ€"a new approach. Dyes and Pigments, 1994, 26, 149-158.	3.7	29
39	Ammonium-azonium tautomerism in some N,N-dialkylaminoazo dyes. Part 1: General considerations. Dyes and Pigments, 1996, 31, 1-12.	3.7	24
40	Tautomerism in azo dyes: Border cases of azo and hydrazo tautomers as possible NMR reference compounds. Dyes and Pigments, 2019, 165, 157-163.	3.7	24
41	Two-Photon Absorption Properties of Azulenyl Compounds Having a Conjugated Ketone Backbone. Journal of Physical Chemistry A, 2008, 112, 5198-5207.	2.5	23
42	Phenolâ€"Quinone Tautomerism in (Arylazo)naphthols and the Analogous Schiff Bases: Benchmark Calculations. Journal of Physical Chemistry A, 2014, 118, 778-789.	2.5	23
43	Dynamics of excited state proton transfer in nitro substituted 10-hydroxybenzo[h]quinolines. Physical Chemistry Chemical Physics, 2017, 19, 26621-26629.	2.8	23
44	Approach for Increased Information from the Second-Derivative Spectra in UV-Vis Absorption Spectroscopy. Applied Spectroscopy, 1993, 47, 1712-1715.	2.2	22
45	7-OH quinoline Schiff bases: are they the long awaited tautomeric bistable switches?. Dyes and Pigments, 2021, 195, 109739.	3.7	22
46	Step by step filter based program for calculations of highly informative derivative curves. Computers & Chemistry, 2000, 24, 561-569.	1.2	21
47	Acylhydrazone Subunits as a Proton Cargo Delivery System in 7â€Hydroxyquinoline. Chemistry - A European Journal, 2021, 27, 11559-11566.	3.3	21
48	Relative strength of the intramolecular hydrogen bonding in 1â€phenylazoâ€naphthalenâ€2â€ol and 1â€phenyliminomethylâ€naphtahlenâ€2â€ol. Journal of Physical Organic Chemistry, 2009, 22, 274-281.	1.9	20
49	Computational Insights into Excitedâ€State Protonâ€Transfer Reactions in Azo and Azomethine Dyes. ChemPhysChem, 2015, 16, 3966-3973.	2.1	20
50	10-Hydroxybenzo[h]quinoline: switching between single- and double-well proton transfer through structural modifications. RSC Advances, 2015, 5, 102495-102507.	3.6	20
51	Resolution of Overlapping Bands â€" An Idea for Quantitative Analysis of Undefined Mixturesa. Analytical Letters, 1996, 29, 2055-2069.	1.8	19
52	4-Hydroxy-1-naphthaldehydes: proton transfer or deprotonation. Physical Chemistry Chemical Physics, 2015, 17, 10238-10249.	2.8	19
53	(Pyrrolo-pyridin-5-yl)benzamides: BBB permeable monoamine oxidase B inhibitors with neuroprotective effect on cortical neurons. European Journal of Medicinal Chemistry, 2019, 162, 793-809.	5.5	19
54	Spectrophotometric investigation of the complex formation of aza-15-crown-5 containing styryl dyes with Ba2+ and Ca2+ cations. Dyes and Pigments, 1995, 27, 219-225.	3.7	18

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55	Thione-disulfide interchange of some heterocyclic tautomeric thiones and their symmetrical disulfides. Monatshefte FÃ¼r Chemie, 1996, 127, 495-504.	1.8	18
56	Aggregation and tautomeric properties of CI Acid red 138. Dyes and Pigments, 1998, 37, 81-92.	3.7	18
57	Fourth derivative spectroscopy â€" a critical view. Analytica Chimica Acta, 1997, 349, 295-301.	5.4	17
58	Step by step filter â€" an approach for noise reduction in the derivative UV-visible spectra. Analytica Chimica Acta, 1996, 324, 77-83.	5.4	16
59	Insight into the aroma profile of Bulgarian tobacco absolute oil. Industrial Crops and Products, 2016, 94, 226-232.	5.2	15
60	Carboxamides vs. methanimines: Crystal structures, binding interactions, photophysical studies, and biological evaluation of (indazole-5-yl)methanimines as monoamine oxidase B and acetylcholinesterase inhibitors. European Journal of Medicinal Chemistry, 2019, 179, 404-422.	5.5	15
61	Indirect solvent assisted tautomerism in 4-substituted phthalimide 2-hydroxy-Schiff bases. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 237, 118416.	3.9	15
62	Ammonium-azonium tautomerism in some N,N-dialkylaminoazodyesâ€"II. Compounds containing more than two protonation sites. Dyes and Pigments, 1996, 32, 171-185.	3.7	14
63	Solvent control of intramolecular proton transfer: is 4-hydroxy-3-(piperidin-1-ylmethyl)-1-naphthaldehyde a proton crane?. Physical Chemistry Chemical Physics, 2017, 19, 7316-7325.	2.8	14
64	Subnanomolar indazole-5-carboxamide inhibitors of monoamine oxidase B (MAO-B) continued: indications of iron binding, experimental evidence for optimised solubility and brain penetration. Journal of Enzyme Inhibition and Medicinal Chemistry, 2017, 32, 960-967.	5.2	14
65	Using Raman Spectroscopy as a Fast Tool to Classify and Analyze Bulgarian Winesâ€"A Feasibility Study. Molecules, 2020, 25, 170.	3.8	14
66	Complexation Properties of Schiff Bases Containing the N-Phenylaza-15-crown-5 Moiety. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2001, 40, 23-28.	1.6	13
67	Controlled Tautomeric Switching in Azonaphthols Tuned by Substituents on the Phenyl Ring. ChemPhysChem, 2015, 16, 649-657.	2.1	13
68	A concept for stimulated proton transfer in 1-(phenyldiazenyl)naphthalen-2-ols. Dyes and Pigments, 2018, 156, 91-99.	3.7	13
69	Spectroscopic study of the complexation of an aza-15-crown-5 containing chromofluoroionophore with Ba2+ and Ca2+ cations. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 1994, 20, 323-333.	1.6	12
70	Colour and constitution relationships in CI Acid Red 138 and its homologues. Dyes and Pigments, 1995, 27, 237-247.	3.7	12
71	Gradual change of one- and two-photon absorption properties in solutionâ€"Protonation of 4-N,N-dimethylamino-4â€²-aminoazobenzene. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 181, 274-282.	3.9	12
72	An integrated approach to the study of the tautomerism of 4-((Phenylimino)methyl) naphthalene-1-ol. Journal of Physical Organic Chemistry, 2007, 20, 313-320.	1.9	12

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73	Solid state tautomerism in 2-((phenylimino)methyl)naphthalene-1-ol. Dyes and Pigments, 2009, 83, 121-126.	3.7	12
74	1,1â€²,1â€²â€²-(2,4,6-Trihydroxybenzene-1,3,5-triyl)triethanone tautomerism revisited. Tetrahedron Letters, 2014, 55, 354-357.	1.4	12
75	The possible tautomerism of the potential rotary switch 2-(2-(2-Hydroxy-4-nitrophenyl)hydrazono)-1-phenylbutane-1,3-dione. Dyes and Pigments, 2017, 144, 249-261.	3.7	12
76	8-(Pyridin-2-yl)quinolin-7-ol as a Platform for Conjugated Proton Cranes: A DFT Structural Design. Micromachines, 2020, 11, 901.	2.9	12
77	Solvent-Triggered Long-Range Proton Transport in 7-Hydroxyquinoline Using a Sulfonamide Transporter Group. Journal of Organic Chemistry, 2022, 87, 6794-6806.	3.2	12
78	Chemical profile and sensory evaluation of Bulgarian rose (Rosa damascena Mill.) aroma products, isolated by different techniques. Journal of Essential Oil Research, 2021, 33, 171-181.	2.7	11
79	Spectrophotometric investigation of the complex formation between aza-15-crown-5 containing chromoionophores and alkali and alkaline earth metal ions in acetonitrile. Talanta, 1994, 41, 1489-1492.	5.5	10
80	Application of the first derivative spectra method for investigation of the complexation of some aza-15-crown-5-containing chromoionophores with Sr. Talanta, 1996, 43, 275-279.	5.5	9
81	Spectral properties of aza-15-crown-5 containing styryl dyes. Dyes and Pigments, 1996, 30, 235-243.	3.7	9
82	Controlled shift in the tautomeric equilibrium of 4-((phenylimino)methyl)naphthalen-1-ol. Journal of Molecular Structure, 2013, 1036, 267-273.	3.6	9
83	A single isomer rotary switch demonstrating anti-Kasha behaviour: Does acidity function matter?. Physical Chemistry Chemical Physics, 2021, 23, 13760-13767.	2.8	9
84	Controlled tautomerism â€“ switching caused by an â€œundergroundâ€•anionic effect. RSC Advances, 2013, 3, 25410.	3.6	8
85	Conformational behaviour of 3-methyl-4-(4-methylbenzoyl)-1-phenyl-pyrazol-5-one: a sudden story of three desmotropes. RSC Advances, 2015, 5, 73859-73867.	3.6	8
86	DFT study of hydrazone-based molecular switches: the effect of different stators on the on/off state distribution. Molecular Physics, 2019, 117, 1604-1612.	1.7	8
87	Chercher de l'eau: The switching mechanism of the rotary switch ethyl-2-(2-(quinolin-8-yl)hydrazono)-2-(pyridin-2-yl)acetate. Computational Materials Science, 2020, 177, 109570.	3.0	8
88	4-OH coumarin based rotary switches: Tautomeric state and effect of the stator. Dyes and Pigments, 2021, 184, 108861.	3.7	8
89	Subcritical Extracts from Major Species of Oil-Bearing Rosesâ€”A Comparative Chemical Profiling. Molecules, 2021, 26, 4991.	3.8	7
90	Gas-Phase Study of Molecular Switches Based on Tautomeric Proton Transfer. European Journal of Mass Spectrometry, 2011, 17, 47-56.	1.0	6

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91	Stereochemistry of Disilanylene-Containing Cyclic Compounds. Thermal Reactions of cis- and trans-3,4-Benzo-1,2-diisopropyl-1,2-dimethyl-1,2-disilacyclobut-3-ene. Organometallics, 2013, 32, 6476-6487.	2.3	6
92	Tautomerism of N-(3,4-dichlorophenyl)-1H-indazole-5-carboxamide â€“ A new selective, highly potent and reversible MAO-B inhibitor. Journal of Molecular Structure, 2017, 1149, 273-281.	3.6	6
93	Tautomerism in 8-(phenyldiazenyl)quinolin-5-ol: An attempt for pH activated rotary switch. Dyes and Pigments, 2020, 182, 108628.	3.7	6
94	Noise Reduction in Second Derivative UV-Vis Spectroscopy. Spectroscopy Letters, 1996, 29, 231-239.	1.0	5
95	Determination of the average orientation of 4-phenylpyridine in nematic solvent by means of infrared linear dichroism: Study of its conformational dependence on the dihedral angle between aromatic rings. Journal of Molecular Structure, 2008, 875, 540-548.	3.6	5
96	Aggregation of 2â€Aminobenzimidazoleâ€”A Combined Experimental and Theoretical Investigation. ChemPhysChem, 2011, 12, 1747-1755.	2.1	5
97	A simple approach to multifunctionalized N1-alkylated 7-amino-6-azaoxindole derivatives using their in situ stabilized tautomer form. Tetrahedron, 2016, 72, 6455-6466.	1.9	5
98	The Effect of Path Length on the Measurement Accuracies of Wine Chemical Parameters by UV, Visible, and Near-Infrared Spectroscopy. Food Analytical Methods, 2017, 10, 1156-1163.	2.6	5
99	An alternative for the calculation of derivative spectra in the near-infrared spectroscopy. Journal of Near Infrared Spectroscopy, 2017, 25, 145-148.	1.5	5
100	Molecular Insight into Inclusion Complex Formation of Curcumin and Calix[4]arene. ChemistrySelect, 2017, 2, 9658-9662.	1.5	5
101	Tautomerism as primary signaling mechanism in metal sensing: the case of amide group. Beilstein Journal of Organic Chemistry, 2019, 15, 1898-1906.	2.2	5
102	Benzothiazol picolin/isonicotinamides molecular switches: Expectations and reality. Journal of Molecular Liquids, 2022, 356, 118968.	4.9	5
103	Structure investigations of N-acylated imines by means of UV-Vis spectroscopy. Monatshefte FÃ¼r Chemie, 1994, 125, 259-266.	1.8	4
104	Tautocrowns: Aza-15-Crown Moiety Conjugated to a Tautomeric Schiff Base. Spectroscopy Letters, 2010, 43, 22-27.	1.0	4
105	Switching azonaphthols containing a side chain with limited flexibility. Part 1. Synthesis and tautomeric properties. Dyes and Pigments, 2012, 92, 1266-1277.	3.7	4
106	Tautomerism of4,4â€²-dihydroxy-1,1â€²-naphthaldazine studied byexperimental and theoretical methods. Chemistry Central Journal, 2013, 7, 29.	2.6	4
107	Comment on â€œSpectroscopic studies of ketoâ€“enol tautomeric equilibrium of azo dyesâ€•by M. A. Rauf, S. Hisaindee and N. Saleh, RSC Adv., 2015, 5, 18097. RSC Advances, 2015, 5, 67165-67167.	3.6	4
108	4-Carboxyl-2,6-dinitrophenylazohydroxynaphthalenes tautomerism NMR re-explained and other methods verified. Dyes and Pigments, 2017, 142, 226-229.	3.7	4

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109	Quantitative Characterization of Arnicae flos by RP-HPLC-UV and NIR Spectroscopy. Foods, 2019, 8, 9.	4.3	4
110	OH Group Effect in the Stator of Î²-Diketones Arylhydrazone Rotary Switches. Chemistry, 2020, 2, 374-389.	2.2	4
111	Tautomeric influence on the photoinduced birefringence of 4-substituted phthalimide 2-hydroxy Schiff bases in PMMA matrix. Photochemical and Photobiological Sciences, 2021, 20, 687-697.	2.9	4
112	4-Carboxyl-2,6-dinitrophenylazohydroxynaphthalenes tautomerism theoretically re-explained. Dyes and Pigments, 2017, 136, 663-668.	3.7	3
113	Isomerization and aggregation of 2-(2-(2-hydroxy-4-nitrophenyl)hydrazono)-1-phenylbutane-1,3-dione: Recent evidences from theory and experiment. Journal of Molecular Liquids, 2019, 283, 242-248.	4.9	3
114	Attaching tweezers like ionophore to a proton crane: theoretical design of new tautomeric sensors. Molecular Physics, 2019, 117, 1613-1620.	1.7	3
115	New insights into coordination chemistry of Monensin A towards divalent metal ions. Inorganica Chimica Acta, 2020, 505, 119481.	2.4	3
116	A New Dimeric Pd(III)Pd(II) Complex with 7,7,8,8 Tetracyanoquinodimethane (TCNQ). Synthesis and Reactivity in Inorganic, Metal Organic, and Nano Metal Chemistry, 2000, 30, 1643-1651.	1.8	2
117	Pd(II) complexes of acetylcholinesterase reactivator obidoxime. Interdisciplinary Toxicology, 2014, 7, 139-145.	1.0	2
118	Azonaphthol tautomerism and controlled switching: Is it possible?. , 2015, , .		2
119	Spectral Properties and Molecular Structure of 4-Aryl-3-cyano-1,1-diphenyl-2-azabutadienes. Spectroscopy Letters, 1996, 29, 1067-1077.	1.0	1
120	(E)-1-(4-Methoxyanthracen-1-yl)-2-phenyldiazene. Acta Crystallographica Section E: Structure Reports Online, 2011, 67, o993-o993.	0.2	1
121	Solvent effects on the nonlinear optical responses of anil derivatives. AIP Conference Proceedings, 2015, , .	0.4	1
122	Unusual Para-Substituent Effects on the Intramolecular Hydrogen Bond in Hydrazone-Based Switches: Insights from Chemical Landscape Analysis and DFT Calculations. Physchem, 2021, 1, 189-201.	1.1	1
123	Acid Dissociation Constants of the Benzimidazole Unit in the Polybenzimidazole Chain: Configuration Effects. Molecules, 2022, 27, 1064.	3.8	1
124	Title is missing!. Transition Metal Chemistry, 2003, 28, 316-322.	1.4	0
125	Comment on â€œLearning To Read Spectra: Teaching Decomposition with Excel in a Scientific Writing Courseâ€• Journal of Chemical Education, 2018, 95, 1679-1681.	2.3	0
126	Tautomerism and Self-Association in the Solution of New Pinene-Bipyridine and Pinene-Phenanthroline Derivatives. Molecules, 2020, 25, 298.	3.8	0

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127	Oxime-containing acetylcholinesterase reactivators and their complexes with Pd(II) and Pt(II) ions: recent developments. Turkish Journal of Chemistry, 2018, 42, .	1.2	0