



Dr. Muhammad Balal

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AREA OF INTEREST

Development of new and sensitive methods for the analysis of essential Trace and Toxic metal in industrial, environmental and Biological samples and using different instrumental and statistical techniques for evaluation and interpretations.

- ✚ Environmental pollution studies related to water, soil and sludge.
- ✚ Biomonitoring of toxic elements in human hairs, plants and aquatic animals.
- ✚ Quality Control measurement for industrial materials and consumer commodities like food, drugs and edible oils etc.
- ✚ Academic and Research experience in Chemistry laboratories of Erciyes University, Kayseri, Turkey; University of Karachi, Abdul Wali Khan University Mardan; University Science & technology Bannu, NED University of Engineering & Technology and National Centre of Excellence in Analytical chemistry involving instrumental methods of analysis with special emphasis on green solvent extraction, electro-analytical, Chromatographic and Spectrometric analytical techniques.

Research Publication

(Annex 05)

One Hundred Twenty EIGHT (128) International Publication.

Impact Factor =412.422, Citations= 4784, h index = 42

Awarded (Annex 03)

Dr. Atta ur Rahman Gold Medal (2014) in Chemistry for young Scientists under 40 from Pakistan Academy of Science.

Research Productivity awards Category "A" (2011-12, 2012-13) & Category "B" (2010-11) from Pakistan Council for Science and Technology, Islamabad, Pakistan.

Research Projects P.I

(Annex 04)

Research project entitled 'Assessing the cause of groundwater nitrate pollution in Pakistan and the development of environmental chemistry research and curriculum at Abdul Wali Khan University'. grant of 195051/-USD Project No.6-4/PAK-US/HEC/2015/04 approved by PAK-US Science and Technology Cooperation Program

Research project entitled "Advance Hollow-Fiber Microextraction Techniques (HF-MET) for the quantitative analysis of toxic and trace elements of the environment: step toward green aspects, developments and perspectives" grant of 3,415,988/-PKR approved under HEC NRPU.

Research project entitled "Electromembrane extraction of the pharmaceuticals from water and biological samples Project No. PSF-MSRT/Env/KP-AWKUM" grant of 5000 EURO ≈558,960/-PKR approved under Pakistan Science Foundation

Joint Research Projects with MSRT, Iran.

Research project entitled "Evaluation of Physico- Chemical parameters and total content of metals in drinking water of district Bannu.", with Grant of PKR 0.5 million approved by Higher Education Commission (No: PM-IPFP/HRD/HEC/2011/0581) and is been completed.

Professional Experience (Annex 02)**Total Teaching/Research Experience (Years/Months/Days)****15 / 00 / 03 ~ 15 years****Post PhD Experience****09 / 07 / 11 ~10 years**

Post	Employer	From	To	Duration D/M/Y
Officer (M4)	Alson Industries [Electroplating Department]	15-12-2003	11-02-2004	26/01/00
Senior Chemist	Yunous textile mill Karachi [Research and development Section]	12-02-2004	19-06-2004	07/04/00
Research Associate	National Center of excellence Analytical Chemistry University of Sindh Jamshoro	15/10/2004	04/06/2009	19/08/04
Assistant Professor(BPS 19 Adhoc)	NED university of Engg. Technology Karachi	15/09/ 2009	31/03/ 2010	16/06/00
Chemist	A&Z Agro Industries Pvt. Ltd. [Edible oil extraction section]	01-04-2010	06-12-2010	05/08/00
Assistant Professor(BPS 19 Contract)	University of Science and Technology Bannu, Bannu.	07-12-2010	31-1-2013	24/01/02
Assistant Professor(TTS)	Abdul Wali Khan University Mardan, Mardan	01-02-2013	11-10-2018	10/08/05
Assistant Professor(BPS 19)	University of Karachi	12-10-2018	To Date	16/08/00

References**Prof. Dr. Tufail Sherazi**

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Email Address:tufail.sherazi@gmail.com Mobile#: 03219614110

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International Publications

(Annex 05)

Impact Factor = 412,422, Citations= 4784, h index = 42

s#	TITLE	Name of Journal	Impact factor	ISI Indexed	Vol. No./ Issue No.	Page No.	Date of Publication
1	A simple colorimetric method for the detection of Mn ²⁺ based on the catalytic oxidation ability of silver nanoparticles,	Materials Research Express	1.151	ISI Indexed	5(12)	125012	2018
2	Approach for downscaling of electromembrane extraction as a lab on-a-chip device followed by sensitive red-green-blue detection,	Analytical chemistry	6.042	ISI Indexed	90(14)	8478-8486.	2018
3	Effects of high fluoride content in livestock drinking water on milk samples of different cattle in endemic area of Pakistan: risk assessment for children	Environmental Science and Pollution Research	2.8	ISI Indexed	25/13	12909-12914	2018
4	Nanomaterial's based chromium speciation in environmental samples: A review	Trends in Analytical Chemistry	7.034	ISI Indexed	103(01)	44-55	2018
5	Determination of Cadmium in Human Serum and Blood Samples after Dispersive Liquid–Liquid Microextraction Using a Task-Specific Ionic Liquid	Analytical Letters	1.206	ISI Indexed	51(05)	673-685	2018
6	Correlation of lithium levels between drinking water obtained from different sources and scalp hair samples of adult male subjects	Environmental geochemistry and health	2.994	ISI Indexed	39(05)	1191-1199	2017
7	A new tunable dispersive liquid-liquid micro extraction method developed for the simultaneous preconcentration of lead and cadmium from lakes water: a multivariate study	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	2.88	ISI Indexed	183(01)	417-424	2017
8	Correlation of cadmium and magnesium in the blood and serum samples of smokers and non-smokers chronic leukemia patients	Biological Trace Element Research	2.361	ISI Indexed	176(01)	81-88	2017
9	Deep eutectic solvent based ultrasonic assisted liquid phase microextraction for the FAAS determination of cobalt	Journal of Molecular Liquids	4.513	ISI Indexed	224(01)	538-543	2016

10	Effective role of magnetic core-shell nanocomposites in removing organic and inorganic wastes from water	Recent patents on nanotechnology	1.475	ISI Indexed	10(03)	202-212	2016
11	The effects of arsenic contaminated drinking water of livestock on its total levels in milk samples of different cattle: Risk assessment in children	Chemosphere	4.427	ISI Indexed	164(01)	427-433	2016
12	Application of conventional and modified cloud point extraction for simultaneous enrichment of cadmium, lead and copper in lake water and fish muscles	Journal of Industrial and Engineering Chemistry	4.841	ISI Indexed	40(01)	137-144	2016
13	Toxic risk assessment of arsenic in males through drinking water in Tharparkar Region of Sindh, Pakistan	Biological Trace Element Research	2.361	ISI Indexed	172(01)	61-71	2016
14	A population assessment of mercury exposure from two cities of Pakistan with respect to freshwater and marine fish consumption	Toxicology and industrial health	1.255	ISI Indexed	32(06)	1033-1041	2016
15	Biosorptive removal of inorganic arsenic species and fluoride from aqueous medium by the stem of Tecomella undulate	Chemosphere	4.427	ISI Indexed	150(01)	320-328	2016
16	Evaluated the adverse effects of cadmium and aluminum via drinking water to kidney disease patients: application of a novel solid phase microextraction method	Environmental toxicology and pharmacology	2.775	ISI Indexed	43(01)	242-247	2016
17	A green microextraction method in a narrow glass column for copper in artificial saliva extract of smokeless tobacco products	Journal of Industrial and Engineering Chemistry	4.841	ISI Indexed	34(01)	27-32	2016
18	Exposure of children to arsenic in drinking water in the Tharparkar region of Sindh, Pakistan	Science of the Total Environment	4.61	ISI Indexed	544(01)	653-660	2016
19	Development of microwave assisted spectrophotometric method for the determination of glucose	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	2.88	ISI Indexed	153(01)	374-378	2016
20	Development of new UV-vis spectroscopic microwave-assisted method for determination of glucose in pharmaceutical samples	pectrochimica Acta Part A: Molecular and	2.88	ISI Indexed	153(01)	212-215	2016

		Biomolecular Spectroscop					
21	Lead assessment in biological samples of children with different gastrointestinal disorders	Biological Trace Element Research	2.361	ISI Indexed	169(01)	41-45	2016
22	Estimation of lead in biological samples of oral cancer patients chewing smokeless tobacco products by ionic liquid-based microextraction in a single syringe system	Environmental Science and Pollution Research	2.8	ISI Indexed	22(16)	12396-12406	2015
23	Correlation of aluminum and manganese concentration in scalp hair samples of patients having neurological disorders	Environmental monitoring and assessment	1.804	ISI Indexed	187(02)	10-Jan	2015
24	Co-exposure of arsenic and cadmium through drinking water and tobacco smoking: risk assessment on kidney dysfunction	Environmental Science and Pollution Research	2.8	ISI Indexed	22(01)	350-357	2015
25	Biologically synthesized silver nanoparticle-based colorimetric sensor for the selective detection of Zn 2+	RSC Advances	2.936	ISI Indexed	5(111)	91158-91165	2015
26	Application of dual-cloud point extraction for the trace levels of copper in serum of different viral hepatitis patients by flame atomic absorption spectrometry: A multivariate study	Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy	2.88	ISI Indexed	133(01)	651-656	2014
27	Evaluation of water quality parameters in drinking water of district Bannu, Pakistan: Multivariate study	Sustainability of Water Quality and Ecology	zero	-----	3(01)	114-123	2014
28	Fluoride and arsenic exposure through water and grain crops in Nagarparkar, Pakistan	Chemosphere	4.427	ISI Indexed	100(01)	182-189	2014
29	Development of green miniaturized dispersive ionic liquid nano-emulsion method for preconcentration of cadmium from canal and waste water samples prior to coupling with graphite furnace atomic absorption spectrometry	Analytical Methods	2.073	ISI Indexed	6(17)	6909-6915	2014
30	Ultrasonic-assisted ionic liquid-based microextraction for preconcentration and determination of aluminum in drinking water, blood and urine samples of	Analytical Methods	2.073	ISI Indexed	6(20)	8277-8283	2014

	kidney failure patients: a multivariate study						
31	Evaluation of lead levels in biological samples of mentally retarded children in different stages using advanced extraction method	Environmental toxicology and pharmacology	2.775	ISI Indexed	36(06)	858-864	2013
32	Evaluation of bioavailability and partitioning of aluminum in sediment samples of different ecosystems by modified sequential extraction methods	CLEAN - Soil Air Wat	1.33	ISI Indexed	41(08)	808-815	2013
33	Hazardous impact of organic arsenical compounds in chicken feed on different tissues of broiler chicken and manure	Ecotoxicology and environmental safety	3.974	ISI Indexed	87(01)	120-123	2013
34	Samples of Kidney Failure Patients by Cloud Point Extraction and Electrothermal Atomic Absorption Spectroscopy	Journal of AOAC International	1.12	ISI Indexed	95(06)	1755-1760	2012
35	Simultaneously determination of methyl and inorganic mercury in fish species by cold vapour generation atomic absorption spectrometry	Food chemistry	4.946	ISI Indexed	134(04)	2345-2349	2012
36	Comparison of urinary iodide determination in female thyroid patients by two techniques	Russian Journal of Electrochemistry	0.88	ISI Indexed	47(12)	1355-1362	2011
37	Status of toxic metals in biological samples of diabetic mothers and their neonates	Biological Trace Element Research	2.361	ISI Indexed	143(01)	196-212	2011
38	Determination of Arsenic in Scalp Hair of Children and its Correlation with Drinking Water in Exposed Areas of Sindh Pakistan	Biological Trace Element Research	2.361	ISI Indexed	143(01)	153-162	2011
39	Chromium and Manganese Levels in Biological Samples of Normal and Night Blindness Children of Age Groups (3-7) and (8-12) Years	Biological Trace Element Research	2.361	ISI Indexed	143(01)	103-115	2011
40	Distribution of Copper, Iron, and Zinc in Biological Samples (Scalp Hair, Serum, Blood, and Urine) of Pakistani Viral Hepatitis (A-E) Patients and Controls	Biological Trace Element Research	2.361	ISI Indexed	143(01)	116-130	2011
41	Evaluation of Essential Trace and Toxic Elements in Biological Samples of Normal and Night Blindness Children of Age Groups 3-7 and 8-12 Years	Biological trace element research	2.361	ISI Indexed	143(01)	20-40	2011
42	Cloud point extraction for determination of lead in blood samples of children, using different ligands prior to analysis by flame atomic absorption	Journal of Hazardous	6.434	ISI Indexed	192(03)	1132-1139	2011

	spectrometry: A multivariate study	Materials					
43	Chromium and Manganese Levels in Biological Samples of Pakistani Myocardial Infarction Patients at Different Stages as Related to Controls	Biological trace element research	2.361	ISI Indexed	142(03)	259-273	2011
44	Evaluation of cadmium, chromium, nickel, and zinc in biological samples of psoriasis patients living in Pakistani cement factory area	Biological trace element research	2.361	ISI Indexed	142 (3)	323-334	2011
45	Association of environmental toxic elements in biological samples of myocardial infarction patients at different stages	Biological trace element research	2.361	ISI Indexed	141(03)	26-40	2011
46	Interactions between cadmium and zinc in the biological samples of Pakistani smokers and nonsmokers cardiovascular disease patients	Biological trace element research	2.361	ISI Indexed	139(03)	257-268	2011
47	Evaluation of status of cadmium, lead, and nickel levels in biological samples of normal and night blindness children of age groups 3–7 and 8–12 years	Biological trace element research	2.361	ISI Indexed	142 (3)	350-361	2011
48	Effects of selenium supplementation on iodine and thyroid hormone status in a selected population with goitre in Pakistan.	Clinical laboratory	1.03	ISI Indexed	57(7-8)	575-585	2011
49	Evaluation of arsenic levels in grain crops samples, irrigated by tube well and canal water	Food and Chemical Toxicology	3.977	ISI Indexed	49(01)	265-270	2011
50	The influence of environmental exposure on lead concentrations in scalp hair of children in Pakistan	Ecotoxicology and environmental safety	3.974	ISI Indexed	74(04)	727-732	2011
51	Inorganic arsenic speciation in groundwater samples using electrothermal atomic spectrometry following selective separation and cloud point extraction	Analytical Sciences	1.355	ISI Indexed	27(04)	439-439	2011
52	Evaluation of status of zinc, copper, and iron levels in biological samples of normal children and children with night blindness with age groups of 3–7 and 8–12 years	Biological trace element research	2.361	ISI Indexed	142 (3)	323-334	2011
53	Evaluating the accumulation of arsenic in maize (Zea mays L.) plants from its growing media by cloud point extraction	Food and Chemical Toxicology	3.977	ISI Indexed	48(11)	3051-3057	2010
54	Speciation and evaluation of Arsenic in surface water and groundwater samples:	Ecotoxicology and	3.974	ISI Indexed	73(05)	914-923	2010

	A multivariate case study	environmental safety					
55	Interaction of copper with iron, iodine, and thyroid hormone status in goitrous patients	Biological Trace Element Research	2.361	ISI Indexed	134(03)	265-279	2010
56	Evaluation of toxic elements in baby foods commercially available in Pakistan	Food Chemistry	4.946	ISI Indexed	119(04)	1313-1317	2010
57	Evaluation of toxic elements in scalp hair samples of myocardial infarction patients at different stages as related to controls	Biological Trace Element Research	2.361	ISI Indexed	134(01)	12-Jan	2010
58	Determination of inorganic arsenic species (As ³⁺ and As ⁵⁺) in muscle tissues of fish species by electrothermal atomic absorption spectrometry (ETAAS)	Food chemistry	4.946	ISI Indexed	119(02)	840-844	2010
59	Total mercury determination in different tissues of broiler chicken by using cloud point extraction and cold vapor atomic absorption spectrometry	Food and chemical toxicology	3.977	ISI Indexed	48(01)	65-69	2010
60	Evaluation of cadmium, lead, nickel and zinc status in biological samples of smokers and nonsmokers hypertensive patients	Journal of human hypertension	2.433	ISI Indexed	24(01)	34-43	2010
61	Evaluating the accumulation of arsenic in maize (Zea mays L.) plants from its growing media by cloud point extraction	Food and chemical toxicology	3.977	ISI Indexed	48(11)	3051-3057	2010
62	Interaction of cadmium and zinc in biological samples of smokers and chewing tobacco female mouth cancer patients	Journal of Hazardous Materials	6.434	ISI Indexed	176(1-3)	985-991	2010
63	Optimization of ultrasonic-assisted acid extraction of mercury in muscle tissues of fishes using multivariate strategy	Journal of AOAC international	1.12	ISI Indexed	92(05)	1580-1586	2009
64	Hazardous impact of arsenic on tissues of same fish species collected from two ecosystem	Journal of Hazardous Materials	6.434	ISI Indexed	167(1-3)	511-515	2009
65	Evaluation of arsenic, cobalt, copper and manganese in biological samples of steel mill workers by electrothermal atomic absorption spectrometry	Toxicology and Industrial Health	1.255	ISI Indexed	25(01)	59-69	2009
66	Accumulation of arsenic in different fresh water fish species–potential contribution to high arsenic intakes	Food chemistry	4.946	ISI Indexed	112(02)	520-524	2009
67	Effect of zinc supplementation on the zinc level in serum and urine and their	Clinical Nutrition	5.496	ISI Indexed	8(02)	162-168	2009

	relation to thyroid hormone profile in male and female goitrous patients						
68	Assessment of water quality of polluted lake using multivariate statistical techniques: A case study	Ecotoxicology and environmental safety	3.974	ISI Indexed	72(02)	301-309	2009
69	Comparison of different extraction approaches for heavy metal partitioning in sediment samples	Pedosphere	2.43	ISI Indexed	19(04)	476-485	2009
70	Determination of toxic elements in infant formulae by using electrothermal atomic absorption spectrometer	Food and Chemical Toxicology	3.977	ISI Indexed	47(07)	1425-1429	2009
71	Time-saving application for sequential extraction of heavy metals by optimized BCR method and lixiviation from untreated sewage sludge	Acta Agronomica Hungarica	0.19	ISI Indexed	57(02)	215-230	2009
72	Speciation of heavy metals in untreated sewage sludge by using microwave assisted sequential extraction procedure	Journal of Hazardous Materials	6.434	ISI Indexed	163(2-3)	1157-1164	2009
73	Assessment of toxic metals in raw and processed milk samples using electrothermal atomic absorption spectrophotometer	Food and Chemical Toxicology	3.977	ISI Indexed	47(09)	2163-2169	2009
74	Status of essential trace metals in biological samples of diabetic mother and their neonates	Archives of gynecology and obstetrics	2.236	ISI Indexed	280(03)	415-423	2009
75	Determination of arsenic levels in lake water, sediment, and foodstuff from selected area of Sindh, Pakistan: estimation of daily dietary intake	Food and Chemical Toxicology	3.974	ISI Indexed	47(01)	242-248	2009
76	Determination of toxic elements in different brands of cigarette by atomic absorption spectrometry using ultrasonic assisted acid digestion	Environmental Monitoring and Assessment	1.804	ISI Indexed	154(01)	155-167	2009
77	Evaluation of an ultrasonic acid digestion procedure for total heavy metals determination in environmental and biological samples	Journal of Hazardous Materials	6.434	ISI Indexed	161(2-3)	1391-1398	2009
78	Variation in accumulation of heavy metals in different varieties of sunflower seed oil with the aid of multivariate technique	Food Chemistry	4.946	ISI Indexed	115(01)	318-323	2009
79	Respiratory effects in people exposed to arsenic via the drinking water and	Science of the total	4.61	ISI Indexed	407(21)	5524-5530	2009

	tobacco smoking in southern part of Pakistan	environment					
80	Optimization of cloud point extraction and solid phase extraction methods for speciation of arsenic in natural water using multivariate technique	Analytica Chimica Acta	5.123	ISI Indexed	651(01)	57-63	2009
81	Determination of copper and iron in biological samples of viral hepatitis (A–E) female patients	Biological Trace Element Research	2.361	ISI Indexed	129(1-3)	78-87	2009
82	Variation in accumulation of heavy metals in different varieties of sunflower seed oil with the aid of multivariate technique.	Food Chemistry	4.946	ISI Indexed	115(01)	318-323	2009
83	The correlation of arsenic levels in drinking water with the biological samples of skin disorders	Science of the Total Environment	4.61	ISI Indexed	407(03)	1019-1026	2009
84	Arsenic fractionation in sediments of different origins using BCR sequential and single extraction methods	Journal of Hazardous Materials	6.434	ISI Indexed	167(1-3)	745-751	2009
85	Toxic metals distribution in different components of Pakistani and imported cigarettes by electrothermal atomic absorption spectrometer	Journal of Hazardous Materials	6.434	ISI Indexed	163(01)	302-307	2009
86	Heavy metal accumulation in different varieties of wheat (<i>Triticum aestivum</i> L.) grown in soil amended with domestic sewage sludge	Journal of Hazardous Materials	6.434	ISI Indexed	164(2-30)	1386-1391	2009
87	Evaluation of arsenic and other physico-chemical parameters of surface and ground water of Jamshoro, Pakistan	Journal of Hazardous Materials	6.434	ISI Indexed	166(2-3)	662-669	2009
88	Comparison of electrothermal and hydride generation atomic absorption spectrometry for the determination of total arsenic in broiler chicken	Food Chemistry	4.946	ISI Indexed	133(04)	1351-1355	2009
89	Distribution of zinc, copper and iron in biological samples of Pakistani myocardial infarction (1st, 2nd and 3rd heart attack) patients and controls	Clinica Chimica Acta	2.926	ISI Indexed	389(1-2)	114-119	2009
90	Estimation of toxic metals in scalp hair samples of chronic kidney patients	Biological Trace Element Research	2.361	ISI Indexed	127(01)	16-27	2009
91	Potassium, calcium, magnesium, and sodium levels in biological samples of hypertensive and nonhypertensive diabetes mellitus patients	Biological Trace Element Research	2.361	ISI Indexed	124(03)	206–224	2008

92	Total dissolved and bioavailable elements in water and sediment samples and their accumulation in <i>Oreochromis mossambicus</i> of polluted Manchar Lake	Chemosphere	4.427	ISI Indexed	70(10)	1845-1856	2008
93	Time saving modified BCR sequential extraction procedure for the fraction of Cd, Cr, Cu, Ni, Pb and Zn in sediment samples of polluted lake	Journal of Hazardous Materials	6.434	ISI Indexed	160(01)	235-239	2008
94	Speciation of heavy metals in sediment by conventional, ultrasound and microwave assisted single extraction methods: a comparison with modified sequential extraction procedure	Journal of hazardous materials	6.434	ISI Indexed	154(1-3)	998-1006	2008
95	Copper, chromium, manganese, iron, nickel, and zinc levels in biological samples of diabetes mellitus patients	Biological Trace Element Research	2.361	ISI Indexed	122(01)	18-Jan	2008
96	Effect of liming on the distribution of heavy metals in untreated industrial sewage sludge produced in Pakistan for the cultivation of <i>Sorghum bicolor</i> (L.)	The Environmentalist	0.78	ISI Indexed	28(04)	366-375	2008
97	Synthesis, structure determination and chemoselective catalytic studies of amino acids complexes of osmium (II)	Applied Organometallic Chemistry	3.581	ISI Indexed	22(03)	187-192	2008
98	Speciation of heavy metals in sediments by conventional, ultrasound and microwave assisted single extraction methods: a comparison with modified sequential extraction procedure	Journal of Hazardous Materials	6.434	ISI Indexed	154(01)	998-1006	2008
99	Use of sewage sludge after liming as fertilizer for maize growth	Pedosphere	2.43	ISI Indexed	18(02)	203-213	2008
100	A multivariate study: Variation in uptake of trace and toxic elements by various varieties of <i>Sorghum bicolor</i> L.	Journal of Hazardous Materials	6.434	ISI Indexed	158(2-3)	644-651	2008
101	Hazardous impact of toxic metals on tobacco leaves grown in contaminated soil by ultrasonic assisted pseudo-digestion: multivariate study	Journal of Hazardous Materials	6.434	ISI Indexed	155(1-2)	216-224	2008
102	Evaluation of toxic metals in blood and urine samples of chronic renal failure patients, before and after dialysis	Renal failure	1.44	ISI Indexed	30(07)	737-745	2008
103	A new simple sensitive differential pulse polarographic method for the determination of acrylamide in aqueous solution	Talanta	4.244	ISI Indexed	74(05)	1608-1614	2008

104	Synthesis and X-ray structural studies of amino acids half sandwich complexes of osmium (II)	Turkish Journal of Chemistry	1.377	ISI Indexed	32(02)	237-247	2008
105	Determination of cadmium in whole blood and scalp hair samples of Pakistani male lung cancer patients by electrothermal atomic absorption spectrometer	Science of the total environment	4.61	ISI Indexed	389(2-3)	270-276	2008
106	Evaluation of status of toxic metals in biological samples of diabetes mellitus patients	Diabetes research and clinical practice	2.548	ISI Indexed	80(02)	280-288	2008
107	Evaluation of iron in serum and urine and their relation with thyroid function in female goitrous patients	Biological Trace Element Research	2.361	ISI Indexed	125(03)	203-212	2008
108	Improved Extraction Method for the Determination of Iron, Copper, and Nickel in New Varieties of Sunflower Oil by Atomic Absorption Spectroscopy	Journal of AOAC International	1.12	ISI Indexed	91(02)	400-407	2008
109	Evaluation of total contents of Al, As, Ca, Cd, Fe, K, Mg, Ni, Pb, Zn and their fractions leached to the infusions of different tea samples. A multivariate study	Chemical Speciation and Bioavailability	1.362	ISI Indexed	19(04)	163-173	2007
110	The feasibility of using an industrial sewage sludge produce in Pakistan as agricultural fertilizer used for cultivation of Sorghum bicolor L.	Archives of Agronomy and Soil Science	2.254	ISI Indexed	53(06)	659-671	2007
111	Heavy metals from soil and domestic sewage sludge and their transfer to sorghum plants	Environmental Chemistry Letters	3.125	ISI Indexed	5(04)	209-218	2007
112	Application of fractional factorial design and doehlert matrix in the optimization of experimental variables associated with the ultrasonic-assisted acid digestion of chocolate samples for aluminum determination by atomic absorption spectrometry	Journal of AOAC International	1.12	ISI Indexed	90(06)	1682-1688	2007
113	Determination of toxic elements in muscle tissues of five fish species using ultrasound-assisted pseudodigestion by electrothermal atomic absorption spectrophotometry: Optimization study	Spectroscopy Letters	0.896	ISI Indexed	40(06)	861-878	2007
114	Ultrasound-assisted pseudodigestion for toxic metals determination in fish muscles followed by electrothermal atomic absorption spectrophotometry: Multivariate strategy	Journal of AOAC International	1.12	ISI Indexed	90(04)	1118-1127	2007

115	Heavy metal contents of vegetables grown in soil, irrigated with mixtures of wastewater and sewage sludge in Pakistan, using ultrasonic-assisted pseudo-digestion	Journal of Agronomy and Crop Science	2.571	ISI Indexed	193(03)	218-228	2007
116	Evaluation of aluminum contents in different bakery foods by electrothermal atomic absorption spectrometer	Journal of Food Composition and Analysis	2.956	ISI Indexed	20(3-4)	226-231	2007
117	Speciation of heavy metals in untreated domestic wastewater sludge by time saving BCR sequential extraction method	Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering	1.561	ISI Indexed	42(05)	649-659	2007
118	Evaluation of zinc status in whole blood and scalp hair of female cancer patients	Clinica Chimica Acta	2.926	ISI Indexed	379(1-2)	66-70	2007
119	Determination of cadmium and lead in biological samples by three ultrasonic-based samples treatment procedures followed by electrothermal atomic absorption spectrometry	Journal of AOAC International	1.12	ISI Indexed	90(02)	470-478	2007
120	The correlation of total and extractable heavy metals from soil and domestic sewage sludge and their transfer to maize (<i>Zea mays</i> L.) plants	Toxicological and Environmental Chemistry	1.021	ISI Indexed	88(04)	619-632	2006
121	Atomic absorption spectrometric determination of Zn and Cr levels in scalp human hair samples. Influence of age, gender and diabetic condition	Journal of the Indian Chemical Society	0.1	ISI Indexed	83(10)	1062-1064	2006
122	Application of factorial design in optimization of ultrasonic-assisted extraction of aluminum in juices and soft drinks	Talanta	4.244	ISI Indexed	70(02)	307-314	2006
123	Effect of ultrasound agitation on the release of heavy elements in certified reference material of human hair (CRM BCR 397)	Journal of AOAC International	1.12	ISI Indexed	89(05)	1410-1416	2006
124	Evaluation of essential and toxic metals by ultrasound-assisted acid leaching	Clinica Chimica Acta	2.926	ISI Indexed	369(01)	52-60	2006

	from scalp hair samples of children with macular degeneration patients						
125	An ultrasonic assisted extraction method to release heavy metals from untreated sewage sludge samples	Chemosphere	4.427	ISI Indexed	63(03)	411-420	2006
126	Analysis of heavy metals in scalp hair samples of hypertensive patients by conventional and microwave digestion methods	Spectroscopy Letters	0.896	ISI Indexed	39(02)	203-214	2006
127	Evaluation of toxic metals in biological samples (scalp hair, blood and urine) of steel mill workers by electrothermal atomic absorption spectrometry	Toxicology and Industrial Health	1.255	ISI Indexed	22(09)	381-393	2006
128	Evaluating the mobility of toxic metals in untreated industrial wastewater sludge using a BCR sequential extraction procedure and a leaching test	Analytical and Bioanalytical Chemistry	3.307	ISI Indexed	383(02)	297-304	2005