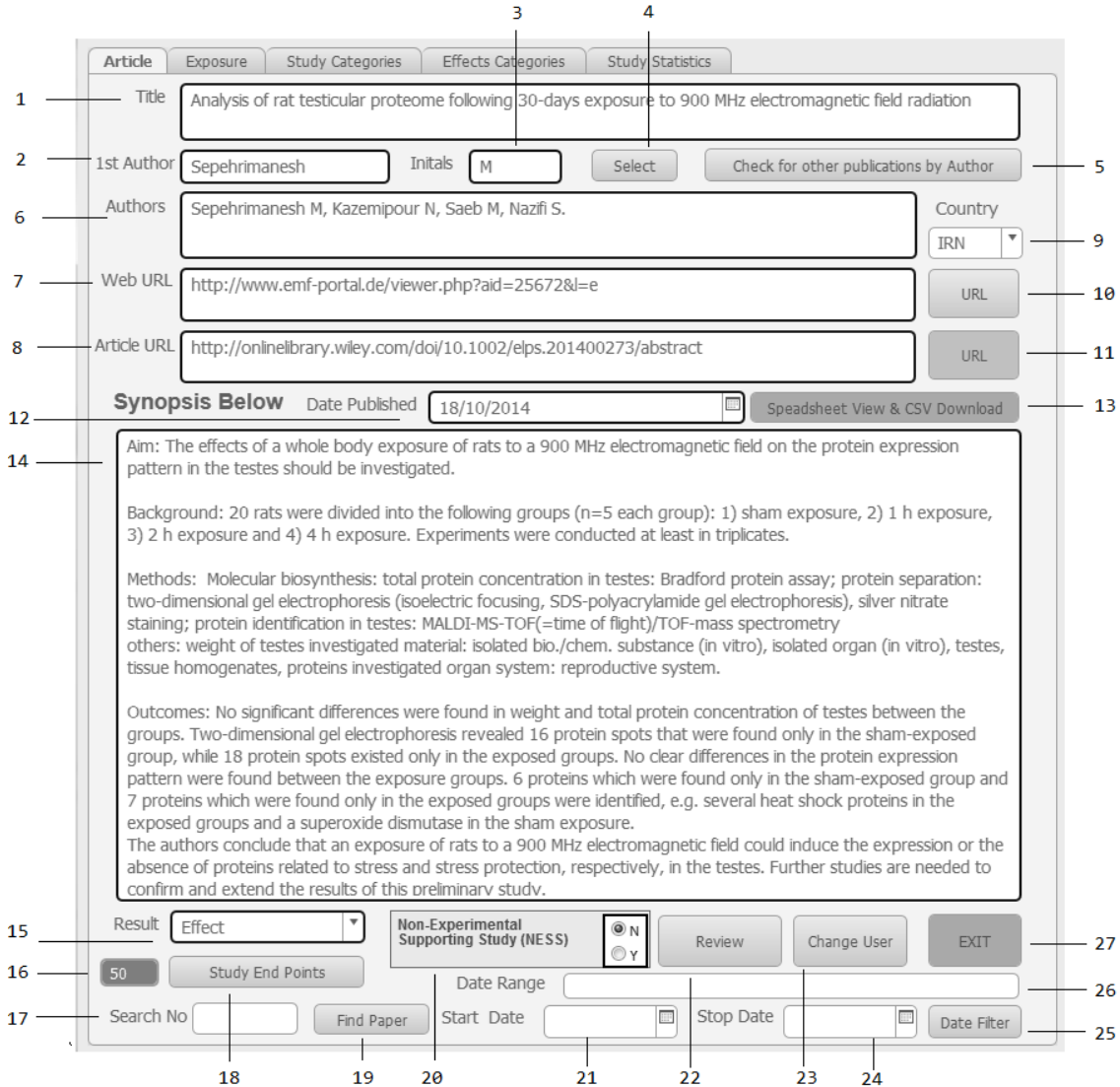


Database Landing Page: Article Tab



Item #	Field Descriptor	Data Dictionary Item	DB Field name
1	Title	Title of paper	Title
2	1 st Author	First author in list of authors	MainAuthors
3	Initials of 1 st Author	First author initials	Author_Init
4	Select button	Button that opens know details of 1 st Author	
5	Check for other publications by Author button	Button that opens window that shows a list of publications by the 1 st Author	
6	List of all authors		Authors
7	Web URL	This is either PubMed, EMF portal address or other address where abstract of Synopsis is located. EMF portal is preferred address if available	WLink
8	Article URL	URL for journal article of pdf location for free articles	Paper_URL
9	County	Drop down list for acronym for Country code	C_Code

10	URL button	Select window for Web URL	
11	URL button	Select window for Paper_URL	
12	Date Published	Date of publication or Month Journal release	Date_Pub
13	Spreadsheets View & CSV Download button	Button to download find search selection. Produces a CSV file to the users desktop.	
14	Synopsis Below	Abstract or Synopsis of article	Main_Review
15	Result	Dropdown list Effect/No Effect/Uncertain Effect/NESS/Retraction	Effect
16		This is the main primary key for each paper entered. This is a discreet number. This is an auto-number entry.	PaperID
17	Search No	Enter the PaperID and works with "Find paper" Button Item# 19	Paper_search
18	Study End Points	Open End Point window for Experiment button. There can be a number of end points for a particular paper	
19	Find paper	Button finds paper with Paper ID number entered at Item #17	
20	Non-Experimental Supporting Study (NESS)	Yes/No answer Y indicates NESS paper. Literature reviews and meta-analyses were published in peer-reviewed journals. Other materials were not peer reviewed e.g. reports.	ExStat
21	Start Date	The beginning of a search criteria and entered with item #24 being the stop date	StartDate
22	Review button	Button for Recorder's review if required	
23	Change user button	Login default is Guest which gives read only access. This can be used to change access to database. Different users have different privileges with regard to data entry.	
24	Stop date	The end date of a search criteria and entered with item #21 being the stop date	StopDate
25	Date Filter	The date filter work with Start date and Stop date and produces a search string at items #26 that can be used in find search (eg. 01/01/2000...01/01/2003 . result is in item #26. Note: the 3 dots between the dates	
26	Date range	Copy and paste string for use in find searches	aDate
27	Exit	Exit database. If you close the window it will also exit and if the main screen is left open for a prolonged operation (10 minutes) with no activity the database will disconnect from screen window and you will need to log in again.	

Exposure Tab

Article Exposure Study Categories Effects Categories Study Statistics

Frequency Categories UHF (300 MHz-3 GHz) studies

Row 1: Cells / Animals: Rats - Sprague Dawley; Organs: Testies; # Exposed: 5; #Controls/Sham: 5; Signal Generated: Microwave; Wave Type: [Dropdown]

Row 2: RF Specific Freq MHz: 900.00; SAR's $W\ kg^{-1}$: 0.00860000; Max Output Power W: 1.22; Duplicate row; Delete Record

Row 3: Comments: power flux density: 86 mW/cm² mean value 22.8 mW/cm² min value 46.8 mW/cm² max value SAR: 0.19 W/q mean value (whole body) (min) 1.22 W/q mean value (whole body) (maximum value); Exposure Duration: Mins: 0, Hrs: 0, Days: 30, Weeks: 0, Years: 0, Hrs/Day: 4, Days/Wk: 7, Cumulative Hrs: 120.00; Exposure Info: [Dropdown]

Row 4: Biological Effects: [Dropdown]; Statistical Method Used: [Dropdown]; Value: [Input]; Lower 95% CI: [Input]; Upper 95% CI: [Input]; +_ or - CI: [Input]

Footer: Analysis of rat testicular proteome following 30-days exposure to 900 MHz electromagnetic field radiation; 50

This is a tiered row as you can have a number of experiments for each paper. The exposure information is only linked for the paper being referenced. There can be a number of exposures to a single paper. This is called a one to many relationship.

Item #	Field Descriptor	Data Dictionary Item	DB Field name
Row 1	Cells/Animal	The data is categorised into a Animal or a Cell type depending on the experiment. Drop down list used to categorised data.	CellAnimals
	Organs	The exposure organs, (eg. Liver, head, whole body etc.) Drop down list used to categorised data.	Organs
	#Exposed	The number of animals exposed in the experiment.	Num_Exposed
	#Controls/Sham	The number of animals used as controls in experiment.	Num_Control
	Signal Generated	Type of EMF signal used in experiment. Drop down list used to categorised data.	SignalGen
	Wave Type	Type of EMF wave form.	WaveType
Row 2	RF Specific Freq MHz	Specific frequency used in experiment. This can also be the average carrier frequency	SRF
	Low Freq	Lowest frequency which is the low end of a range	RFLow

	High Freq	Highest frequency which is the low end of a range	RFHigh
	SAR's W kg ⁻¹	Average or Maximum Specific Absorption Value used in experiment used in experiment	Sar_val
	Power Density mW m ⁻²	Average or Maximum Power density used in experiment	PowerDensity
	Max Output Power W	Max Output power from EMF source	OutputPow
	Magnetic Field μT	ELF near field exposures. General most experiments quote an average or maximum exposure.	BField
	Electric Field V/m	Average or Maximum electric field used in experiment	E_Field
Row 3		Exposure Duration	
	Mins	EMF exposure in minutes	Exp_Mins
	Hrs	EMF exposure in hours	Exp_Hrs
	Days	EMF exposure in Days	Exp_Days
	Weeks	EMF exposure in Weeks	Exp_Weeks
	Years	EMF exposure in Years	Exp_Years
	Hrs/Day	EMF exposure Hours per day	HrPerday
	Days/Wk	EMF exposure Days per Week	DaysWk
	Cumulative Hrs	Calculated value : [(Exp_Mins/60)+Exp_Hrs +(Exp_Days*24) +(Exp_Weeks*24*7) +(Exp_Years*365*24)] *(DaysWk/7) *(HrPerday/24)	CummHrs
	Exposure Info	Extra exposure information	Exp_pause
	Biological Effects	Categorised Biological effects. Selection from drop down list.	
	Statistical Method Used	Statistical method used.	Stats_Method
	< Value	Probability value of less than.	Stats_ratio
	Lower 95% CI	Lower value of 95% confidence limit	LowerConfid
	Upper 95% CI	Upper value of 95% confidence limit	UpperConfid
	+ or - CI	Upper and Lower confidence limit expressed as a percentage about the value. Used for symmetrical distribution.	
5	Frequency Categories	Categorisation of frequency band used for exposure in experiment	Freq_Cat
6	Duplicates row	Allows for quick data entry. The exposure table is a many relationship to this single paper. This copies the current exposure to another row in the exposure table and allows you to edit the details of the next experiment that may be almost the same except for maybe the exposure time. Administrator only function.	
7	Delete Record	This deletes the current row from the exposure table. Administrator doing the data entry can only use this. This allows for quick data entry.	
8		Allows for free formatted comments on this exposure	Exp_Comments
9		This is the title of the paper. Repeated from landing page for reference	Title
10		This is the main primary key for each paper entered. This is a discreet number. This is an auto-number entry. Repeated from landing page for reference	Paper ID

Study Categories Tab

The screenshot shows the 'Study Categories' tab with the following categories and their 'Yes/No' radio buttons:

- In vitro**: N, Y
- In vivo**: N, Y
- Animal Study**: N, Y
- Plant Study**: N, Y
- Dosimetry**: N, Y
- Human Provocation**: N, Y
- Epidemiology**: N, Y
- Prospective Design**: N, Y
- Meta - Analysis**: N, Y

Below the categories are the following sections:

- ARPANSA Source**: A dropdown menu.
- ARPANSA Summary**: A button.
- Summary Totals**: A button.
- Funding Source**: A grid of radio buttons for Government, Private, Public Not-for-Profit, Industry, Institutional, United Nations, and Not Known.
- Funding Source**: A text field containing 'School of Veterinary Medicine and Research Council of Shiraz University, Shiraz, Iran'.
- Search**: A search bar with the number '50' and a search button.
- Search Results**: A grey box containing the text 'Analysis of rat testicular proteome following 30-days exposure to 900 MHz electromagnetic field radiation'.

Item #	Field Descriptor	Data Dictionary Item	DB Field name
Row 1	In Vitro	Yes/No answer. Y indicates in vitro study.	InVitro
	In Vivo	Yes/No answer. Y indicates in vivo study.	InVivo
	Animal Study	Yes/No answer. Y indicates animal study.	Animal
	Plant Study	Yes/No answer. Y indicates plant study.	Plants
	Dosimetry	Yes/No answer. Y indicates dosimetry or exposure study.	Dosimetry
	Human Provocation	Yes/No answer. Y indicates human provocation study.	Human_Pro
	Epidemiology	Yes/No answer. Y indicates epidemiology study.	Epidemiology
	Prospective Design	Yes/No answer. Y indicates epidemiology that has Prospective Design built into the study.	Pros_Design
	Meta - Analysis	Yes/No answer. Y indicates that the epidemiology is a combine or meta-analysis study.	MetaA
2	ARPANSA Source	This is a list of ARPANSA literature sources.	ARPANSA_Rep
3	Button ARPANSA Summary	This shows any ARPANSA review or commentary	

4	Button ARPANSA Totals	For selected records this action counts the number of papers in the ARPANSA categories	
Row 5	Funding Categories	Select single or multiple funding categories. Yes/No answer. For each funding source category	
	Government	Government funding used	GFund
	Private	Private funding used	PFund
	Public Not-for-Profit	Public Not-for-Profit funding used	PubFund
	Industry	Industry funding used	IndFund
	Institutional	Institutional funding used	InstFund
	United Nations	United Nations (WHO) used	UnFund
	Not Known	Not stated	UnkFund
6	Funding Source	Free format text on information of funding sources.	Funding
7		This is the main primary key for each paper entered. This is a discreet number. This is an auto-number entry. Repeated from landing page for reference	Paper ID
8		This is the title of the paper. Repeated from landing page for reference	Title

Effect Category Tab

Article	Exposure	Study Categories	Effects Categories	Study Statistics
Auditory Dysfunction / Hearing loss / Tinnitus	<input checked="" type="radio"/> N <input type="radio"/> Y	Apoptosis (Programmed Cell Death) / Cell Death	<input checked="" type="radio"/> N <input type="radio"/> Y	Brain Tumours
Blood Brain Barrier Permeability Changes	<input checked="" type="radio"/> N <input type="radio"/> Y	Breast Cancer	<input checked="" type="radio"/> N <input type="radio"/> Y	Cellular Stress
Brain Development / Neuro Degeneration	<input checked="" type="radio"/> N <input type="radio"/> Y	Biochemical Changes	<input checked="" type="radio"/> N <input type="radio"/> Y	EEG Changes / Brain Wave / Excitability Changes
Neuro Behavioural Effect / Cognitive Effects	<input checked="" type="radio"/> N <input type="radio"/> Y	Cell Irregularities/ Damage/ Morphological Changes	<input checked="" type="radio"/> N <input type="radio"/> Y	Mitochondrial Effects
Calcium Influx / Efflux	<input checked="" type="radio"/> N <input type="radio"/> Y	Fatigue	<input checked="" type="radio"/> N <input type="radio"/> Y	Altered Enzyme Activity/ Protein Levels / Protein Damage
Circadian Rhythm Changes	<input checked="" type="radio"/> N <input type="radio"/> Y	Altered Gene Expression	<input checked="" type="radio"/> N <input type="radio"/> Y	Headaches/Migraines
DNA Damage / Mutagenic / Genotoxic	<input checked="" type="radio"/> N <input type="radio"/> Y	Altered Glucose Metabolism	<input checked="" type="radio"/> N <input type="radio"/> Y	Inflammation
Endocrine / Sex Hormone Level Effects	<input checked="" type="radio"/> N <input type="radio"/> Y	Cardiovascular/Vascular Effect	<input checked="" type="radio"/> N <input type="radio"/> Y	Hepatic Effects (Liver)
Miscarriage / Spontaneous Abortion/ Foetus Resorption	<input checked="" type="radio"/> N <input type="radio"/> Y	Immune System Effects	<input checked="" type="radio"/> N <input type="radio"/> Y	Impaired / Reduced Healing/ Bone Density Changes
Memory Impairment	<input checked="" type="radio"/> N <input type="radio"/> Y	Oxidative Stress / ROS/ Free Radicals	<input checked="" type="radio"/> N <input type="radio"/> Y	Speech Impairment
Sperm / Testicular Effects	<input type="radio"/> N <input checked="" type="radio"/> Y	Sleep Effects	<input checked="" type="radio"/> N <input type="radio"/> Y	Haematological Effects
Tumour Promotion	<input checked="" type="radio"/> N <input type="radio"/> Y	Neurotransmitter Effects	<input checked="" type="radio"/> N <input type="radio"/> Y	Synergistic Effects
Thyroid Effects	<input checked="" type="radio"/> N <input type="radio"/> Y	Visual Disturbances/ Ocular Effects	<input checked="" type="radio"/> N <input type="radio"/> Y	Autism / ADHD / Hyper-Activity
Leukemia	<input checked="" type="radio"/> N <input type="radio"/> Y	Parotid Gland Malignancy	<input checked="" type="radio"/> N <input type="radio"/> Y	Neoplasia/ Hyperplasia (Abno)
Depression	<input checked="" type="radio"/> N <input type="radio"/> Y	Induced Adaptive Response	<input checked="" type="radio"/> N <input type="radio"/> Y	Dizziness / Vertigo/ Vestibular Effects

50 Other Sub-Types Effects Find Summary Totals

For any given paper that shows bio-effect there can be a single or multiple effect categories indicated.

Item #	Field Descriptor	Data Dictionary Item	DB Field name
Row 1 Left to Right down the page	Auditory Dysfunction / Hearing loss / Tinnitus	Yes/No answer.	AD
	Apoptosis (Programmed Cell Death) / Cell Death	Yes/No answer.	AP
	Brain Tumours	Yes/No answer.	BT
	Blood Brain Barrier Permeability Changes	Yes/No answer.	BB
	Breast Cancer	Yes/No answer.	BC
	Cellular Stress	Yes/No answer.	CS
	Brain Development / Neuro Degeneration	Yes/No answer.	BD
	Biochemical Changes	Yes/No answer.	BI
	EEG changes / Brain Waves	Yes/No answer.	EG
	Neuro Behavioural Effect / Cognitive Effects	Yes/No answer.	BM
	Mitochondrial Effects	Yes/No answer.	EM
	Cell Irregularities/ Damage/Morphological Changes	Yes/No answer.	CI
	Mitochondrial Effects	Yes/No answer.	EA

	Calcium Influx / Efflux	Yes/No answer.	CA
	Fatigue	Yes/No answer.	FA
	Altered Enzyme Activity/Protein Levels / Protein Damage	Yes/No answer.	EA
	Circadian Rhythm Changes	Yes/No answer.	CR
	Altered Gene Expression	Yes/No answer.	GE
	Headaches/Migraines	Yes/No answer.	HA
	DNA Damage / Mutagenic Genotoxic	Yes/No answer.	DD
	Altered Glucose Level /Glucose Metabolism	Yes/No answer.	GM
	Inflammation	Yes/No answer.	IN
	Endocrine / Sex Hormone Level Effects	Yes/No answer.	EN
	Cardio/vascular Effects	Yes/No answer.	HR
	Hepatic Effects (Liver)	Yes/No answer.	IS
	Miscarriage /Spontaneous Abortion/ Foetus Resorption	Yes/No answer.	MC
	Immune System Effects	Yes/No answer.	MD
	Impaired / Reduced Healing/ Bone Density Changes	Yes/No answer.	RH
	Memory Impairment	Yes/No answer.	MR
	Oxidative Stress / ROS/Free Radicals	Yes/No answer.	OS
	Speech Impairment	Yes/No answer.	SI
	Sperm /Testicular Effects	Yes/No answer.	SE
	Sleep Effects	Yes/No answer.	SP
	Haematological Effects	Yes/No answer.	TN
	Tumour Promotion	Yes/No answer.	TP
	Neurotransmitter Effects	Yes/No answer.	ANeuroT
	Synergistic/Combinative Effects	Yes/No answer.	aSynergistic
	Thyroid Effects	Yes/No answer.	aThyroid
	Visual Disturbances/Ocular Effects	Yes/No answer.	OC
	Autism / ADHD / Hyper-Activity	Yes/No answer.	AT
	Leukemia	Yes/No answer.	Luk
	Parotid Gland Malignancy	Yes/No answer.	ParG
	Neoplasia/ Hyperplasia (Abnormal Tissue Growth)	Yes/No answer.	Renal
	Depression	Yes/No answer.	Dep
	Induced Adaptive Response	Yes/No answer.	Ind
	Dizziness / Vertigo/Vestibular Effects	Yes/No answer.	Diz
2	This is the main primary key for each paper entered. This is a discreet number. This is an auto-number entry. Repeated from landing page for reference		paperID
3	Other Sub-Types Effects.	Free formatted text for effects that are not covered by categories above, eg Effect Positive	OtherEff
4	Find Summary Totals button	For the selected records following a find search summarises the number of papers in each Effect category.	

Study Statistics Tab

Estimated talk time mins per day = max cumulative hrs divide by length of study

$$\text{Odds Ratio} = \frac{(\text{Exposed Cases} \times \text{Unexposed Control})}{(\text{Exposed Controls} \times \text{Unexposed Cases})}$$

Description of Group	#Yrs	#Hrs Max	Min/day	# Cases	# Control	Odds Ratio	Lower CI	Upper CI	+/_CI
Headaches and migraine				298	126		1.4200	1.1200	1.8100
2042 children aged 11 to 15 years in									

Upper and lower 95% Confidence Intervals.

Mobile phone use and health symptoms in children

120

Item #	Field Descriptor	Data Dictionary Item	DB Field name
1	Description of Group	Description of epidemiological group studied; eg. "life-long cumulative Hrs > =896"	Group_Desc
2	Sub-set within the group	Selection of sub-set; eg. "men and women, aged over 16 years"	Cat_Desc
3	Disease being studied in statistical group.	Selection from Drop down list containing disease; eg. Glioma or Temporal tumours etc.	CancerType
4	Period	Period that study ; eg. June 2004 - May 2006	YrsOfStudy
5	Duplicate Row	Allows for quick data entry. The exposure table is a many relationship to this single paper. This copies the current exposure to another row in the exposure table and allows you to edit the details of the next experiment that may be almost the same except for maybe the exposure time. Administrator only function.	
6	Delete Row	This deletes the current row from the exposure table. Administrator doing the data entry can only use this. This allows for quick data entry.	
7		This is the title of the paper. Repeated from landing page	Title

		for reference	
8		This is the main primary key for each paper entered. This is a discreet number. This is an auto-number entry. Repeated from landing page for reference	Paper ID
9	#Yrs	Number of years that the study covers.	NumYrs
10	#Hrs Max	Maximum number of Hours used	CHours
11	Min/day	Calculated field (CHours*60)/(NumYrs*365) Number of talk time minutes per day.	TalkTime
12	# Cases	Number of cases reviewed	CaseNo
13	# Control	Number of control used	ControlNo
14	Statistical Method used	Drop down list. Select Odds ratio, Risk rataio etc..	Stats_Method
15	Value	Probability value	OddsRatio
16	Lower 95% CI	Lower value of 95% confidence limit	LowerConfid
17	Upper 95% CI	Upper value of 95% confidence limit	UpperConfid
18	+ or - CI	Upper and Lower confidence limit expressed as a percentage about the value. Used for symmetrical distribution.	Confid