

Indian Institute of Technology, Kharagpur

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Summary **Awarded Grants** Collaboration Published Viewed Cited Economic Impact Societal Impact Authors **Competencies**

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Competencies of the Indian Institute of Technology, Kharagpur in **2015** ☐ based on an analysis of publications over the period 2011-2015

Table Circle Matrix

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ID	Keywords	Most published authors	Publications	Citations
DC #1	Speech; Speech recognition; Database systems	Rao K., Koolagudi S.G., Yadav J.	102 ▼	363
DC #2	Electroosmosis; Microchannels; Fluids	Chakraborty S., Bandopadhyay A., Ghosh U.	92 ▲	454
DC #3	Networks (circuits); Design; Testing	Chattopadhyay S., Sengupta I., Pratihari D.K.	72 ▼	152
DC #4	Nigella sativa; Electric Impedance; Lipopeptides	Mandal M., Rajput S.S., Sen R.	63 ▲	506
DC #5	Aloe; Moisture; Isotherms	Shrivastava S.L., Rao P., Mishra H.N.	28 ▲	70
EC #6	Linear matrix inequalities; Stability criteria; Lyapunov functions	Ray G.G., Ramakrishnan K.V., Ray G.	31 ▼	138
DC #7	Thermal conductivity; Nanoparticles; Nanofluidics	Chakraborty S., Pal S.K., Ravikumar S.V.	43 ▼	354
EC #8	groundwater; arsenic; aquifer	Mukherjee A., Sar P., Jha M.K.	42 ▲	195
DC #9	Ionic liquids; liquids; Fluorescence	Sarkar N., Ghosh S.P., Mandal S.	79 ▼	620
DC #10	Image coding; Motion Picture Experts Group standards; Cryptography	Mukhopadhyay D., Rebeiro C., Chakrabarti I.	28 ▼	36
DC #11	Wireless sensor networks; Sensor nodes; Energy utilization	Misra S., Mondal A., Bera S.	64 ▲	230
DC #12	Nanocomposites; Rubber; Clay	Chattopadhyay S., Chattopadhyay P.K., Das C.K.	44 ▼	190
EC #13	Microbial fuel cells; Bioelectric Energy Sources; Anodes	Ghangrekar M.M., Pandit S.N., Das D.	30 ▲	144
DC #14	metamorphism; rock; craton	Bhowmik S.K., Panigrahi M.K., Mishra B.N.	76 ▼	377
DC #15	Access control; Public policy; Models	Sural S., Ghosh S.K., Maity S.	28 ▲	41
EC #16	Photonic crystal fibers; Fibers; Dispersion (waves)	Maji P.S., Chaudhuri P.R., Varshney S.K.	35 ▲	45
DC #17	density functional theory; reactivity; molecules	Chattaraj P.K., Pan S., Giri S.	76 ▲	579
DC #18	Cryptography; Bits; Algorithms	Mukhopadhyay D., RoyChowdhury D., Chowdhury D.R.	41 ▲	83
EC #19	Motion estimation; Image coding; Algorithms	Chakrabarti I., Mukherjee R., Sengupta S.	9 ▼	23
DC #20	Perovskite; Magnetization; Magnetic properties	Venimadhav A., Nath T.K., Chandrasekhar K.D.	38 ▲	156
DC #21	Shear deformation; Laminated composites; Boundary conditions	Singh B.N., Maiti D.K., Grover N.	52 ▲	220
DC #22	Costs; Inventory control; Models	Goswami A.K., Chakraborty D., Roy A.R.	17 ▲	49
DC #23	VLSI circuits; Mapping; Communication	Chattopadhyay S., Manna K., Sahu P.K.	22 ▲	107
DC #24	Ultrafiltration; Membranes; Fluxes	De S., Mondal S., Chhaya	38 ▲	170
DC #25	Steganography; Watermarking; Pixels	Chakraborty C., Naskar R., Chakraborty R.S.	18 ▼	38
EC #26	Field programmable gate arrays (FPGA); Digital computers; Algorithms	Dhar A.S., Prasad N.S., Chakrabarti I.	11 ▼	14
ID	Keywords	Most published authors	Publications	Citations
DC #27	Sericins; Silk; Biomaterials	Kundu S.C., Naskar D., Nayak S.	44 ▲	637
DC #28	Authentication; Cryptography; Access control	Goswami A.K., Odelu V., Mishra D.	32 ▲	155
DC #29	Neural networks; artificial neural network; model	Raghuwanshi N.S., Jha M.K., Adamala S.	26 ▲	171
EC #30	Economic growth; Relationships; Causality	Pradhan R.P., Bele S.K., Pandey S.	23 ▲	34
EC #31	Rubber; Thermoplastics; Vulcanization	Naskar K., Nando G.B., Bhowmick A.K.	39 ▲	142
EC #32	Carbon nanotubes; Nanocomposites; Composite materials	Khatua B.B., Chaki T., Shrivastava N.K.	28 ▼	227
EC #33	Capacitors; Networks (circuits); Dielectric properties	Biswas K., Sen S., Khanra M.	41 ▼	163
EC #34	Cryptography; Public key cryptography; Field programmable gate arrays (FPGA)	Mukhopadhyay D., Rebeiro C., Roy S.S.	14 ▼	50

EC #32	Cryptography; Public key cryptography; Field programmable gate arrays (FPGA)	Mukhopadhyay D., Banerjee S., Roy S.	24 ▼	20
EC #35	column; Columns (structural); Soils	Deb K., Das A.K., Dash S.K.	7 ▲	40
EC #36	Membranes; Proton conductivity; Polyimides	Banerjee S.K., Bandyopadhyay P.C., Bera D.	42 ▲	199
EC #37	Hydrazine; Fluorescence; Nanoparticles	Singh N.D.P., Mukhopadhyay S.K., Pradeep Singh N.D.	17 ▲	84
EC #38	Ruthenium; Ligands; vinylidene	Mandal S.M., Bhattacharjee M.K., Das U.K.U.	19 ▲	101
EC #39	Obstacle detectors; Navigation; Acoustic waves	Mukhopadhyay J., Mahadevappa M., Chakraborty C.	12 ▼	44
EC #40	Waves; Breakwaters; Water waves	Sahoo T., Behera H., Koley S.	29 ▲	71
EC #41	Magnetron sputtering; Films; Substrates	Aich S., Chakraborty M., Geetha Priyadarshini B.	6 ▼	18
EC #42	Cryptography; Field programmable gate arrays (FPGA); Algorithms	Mukhopadhyay D., Banerjee K., De P.	9 ▼	10
EC #43	Silicon; Sensors; Stresses	Das S., Maiti C.K., Maiti T.K.U.	6 ▼	17
EC #44	Catalysts; Synthesis (chemical); Cyclization	Pathak T., Dey S.R., Bhaumik A.	9 ▲	66
EC #45	Heat transfer; Mixed convection; Nusselt number	Guha A., Satyamurty V.V., Samanta S.C.	11 ▲	18
EC #46	Actuators; Vibration control; Piezoelectricity	Ray M.C., Sarangi S.K., Shah P.H.	15 ▼	60
EC #47	spin; Magnetoresistance; Spin polarization	Nath T.K., Das A.K., Panda J.K.	14 ▼	14
EC #48	Nanoparticles; Polymers; Grafting (chemical)	Padmanabhan V., Chattopadhyay S., Panja S.	13 ▲	49
EC #49	Microfluidics; Drops; Wetting	Roy S., DasGupta S., Chakrabarti P.P.	28 ▲	127
EC #50	Epoxy resins; Curing; Polymers	Singha N.K., Maity T.K., Mandal P.R.	15 ▼	31
EC #51	spin; bands; nuclei	Singh A.K., Nag S., Singh P.	25 ▼	85
EC #52	Graph theory; Models; Dynamics	Samantaray A.K., Bera T.K., Bhattacharya K.	21 ▼	69
EC #53	Zinc oxide; Doping (additives); Thin films	Banerji P., Pati S., Majumder S.B.	14 ▲	78
EC #54	Coatings; Microstructure; Wear of materials	Majumdar J.D., Sharma P.K., Dutta Majumdar J.	9 ▲	27
EC #55	Electronic tongues; Modified atmosphere packaging; Product Packaging	Goswami T.K., Mishra H.N., Rao P.	34 ▲	152
EC #56	Dyes; Removal; Wastewater	Sahoo C., Gupta A.K.U., Sasidharan Pillai I.M.	14 ▲	88
EC #57	DC-DC converters; Capacitors; Electric potential	Mandal P.K., Bhattacharyya K., Maity B.	11 ▼	11
EC #58	Supply chains; Supply chain management; Industry	Tiwari M.K., Mahanty B., Agarwal G.K.	3 ▲	25
EC #59	Rotors; Bearings (machine parts); Failure analysis	Naikan V.N.A., Fatima S., Mohanty A.R.	7 ▲	6
EC #60	Electric lines; Transmission line theory; Relay protection	Pradhan A.K., Jena P., Pradhan A.K.	14 ▼	40
EC #61	Nanocomposites; Compatibilizers; Morphology	Khatua B.B., Mallick S., Kar P.	18 ▼	126
EC #62	Irrigation; water resource; Groundwater	Singh A.K.P., Panda S.N., Nath Panda S.	28 ▼	275
EC #63	Electric power distribution; Planning; Optimization	Das D.K., Chakraborty D., Ganguly S.	14 ▼	126
EC #64	Microchannels; Heat transfer; Reynolds number	Chakraborty S., Dey R., Dasgupta S.	9 ▼	46
ID	Keywords	Most published authors	Publications	Citations
EC #65	Polyaniline; Capacitance; Graphene	Das C.K., Dhibar S., Giri S.K.	30 ▲	278
EC #66	Agaricales; Polysaccharides; Agaricus	Maiti T.K.U., Behera B., Devi K.S.P.	50 ▼	432
EC #67	Asynchronous generators; Stators; Rotors	Kastha D., Pattnaik M., Bagarty D.P.	7 ▼	24
EC #68	Formability; Genetic algorithms; Welds	Chakraborti N.B., Sen P., Giri B.K.	32 ▲	257
EC #69	Adders; Networks (circuits); Redundancy	Mukherjee A., Dhar A.S., Krishna Kumar S.	5 ▲	1
EC #70	Wireless sensor networks; Sensor nodes; Sensor networks	Misra S., Pavan Kumar M.V.S., Datta R.	5 ▼	27
EC #71	Capacitance; Electrodes; Current density	Ghosh D., Giri S.K., Das C.K.	7 ▲	69
EC #72	Fatigue of materials; Face recognition; Electroencephalography	Routray A., Dasgupta A., Pradhan T.R.	4 ▼	4
EC #73	Textures; Pulmonary diseases; Tomography	Chouhan R., Biswas P.K., Dash J.K.	22 ▲	49
EC #74	Cyclization; Enediyne; Synthesis (chemical)	Basak A.K., Basak A., Anoop A.	32 ▲	169
EC #75	Fermentation; Ethanol; Enzymatic hydrolysis	Chakraborty S., Banerjee R., Kuila A.	7 ▲	17
EC #76	Robots; Mobile robots; Robotics	Pratihari D.K.	6	38
EC #77	Hardening; Low carbon steel; Steel	Singh S.B., Mohanty O.N., Ray K.K.	6 ▼	11
EC #78	Models; Social networking (online); Data mining	Mukherjee A., Goyal P., MITRA S.	6 ▲	13
EC #79	Biodegradation; Degradation; Polyethylene	Nando G.B., Chaki T., Nayak S.S.	6 ▲	10
EC #80	Integral equations; Fredholm integral equation; Method	Nelakanti G., Das P.K., Sahani M.M.	12 ▲	13

EC #81	Cycloaddition; Single crystals; Solids	Biradha K., Santra R., Garai M.	9 ▼	159
EC #82	Human computer interaction; Reaction Time; Touch screens	Samanta D., Sarcar S., Ghosh S.K.	4 ▼	4
EC #83	Finite Element Analysis; Pelvis; Acetabulum	Ghosh R.K., Gupta S., Pal B.	9 ▲	25
EC #84	Nanocomposites; Clay; Clay minerals	Tripathy D.K., Barick A.K., Kotal M.	13 ▼	97
EC #85	Pressure Ulcer; Bandages; Skin	Majumdar A.K.U., Sural S., Majumdar B.	5 ▼	9
EC #86	Temporal logic; Verification; Specifications	Dasgupta P.K., Mukherjee S., Mukhopadhyay S.C.	9 ▼	17
EC #87	Abortion, Habitual; Pregnancy; Abortion, Spontaneous	Chaudhury K., Banerjee P., Jana S.K.	3 ▲	18
EC #88	Nanocomposites; Carbon nanotubes; Composite materials	Khastgir D.K., Chaki T., Khatua B.B.	28 ▲	219
EC #89	Friction; Wheels; Rails	Racherla V., Vakkalagadda M.R.K., Vineesh K.P.	6 ▲	5
EC #90	X ray screens; Mammography; Database systems	Mukhopadhyay S., Chakraborty J., Jas M.	12 ▼	63
EC #91	DC-DC converters; Transient analysis; Electric potential	Kapat S., Hariharan K.A., Patra A.	9 ▲	45
EC #92	Ferrite; Steel; Microstructure	Chakrabarti D., Karmakar A.K., Patra S.	14 ▼	45
EC #93	model; Runoff; Watersheds	Panda R.K., Maity R., Bhagwat P.P.	6 ▼	30
EC #94	Sediments; suspended sediment; sediment	Ghoshal K.S., Kundu S.N., Pal D.	13 ▲	17
EC #95	Electric relays; Electric potential; Buses	Pradhan A.K., Rao J.G., Bajpai P.	11 ▲	39
EC #96	Cryptography; Public policy; Access control	Dutta R., Rao Y.S., Sreenivasa Rao Y.	7 ▲	11
EC #97	Cryptography; Management; Hardware	Mukhopadhyay S., Mishra D., Dutta R.	6 ▼	14
EC #98	Chitosan; Stents; Hydrogels	Dhara S., Ganguly S., Bal D.K.	18 ▲	140
EC #99	Antioxidants; Oils; Peroxides	Mishra H.N., Upadhyay R., Mandal M.	6 ▲	20
EC #100	Ribonuclease, Pancreatic; Tryptophan Synthase; Enzymes	Dasgupta S., Pathak T., Tripathy D.R.A.	12 ▲	28
EC #101	Radio; Wireless sensor networks; Sensor nodes	Misra S., Mahapatro J., Islam N.	3 ▼	1
EC #102	Bandwidth; Electric connectors; Design	Velidi V.K., Sanyal S., Shrivastava S.K.	5 ▼	7
ID	Keywords	Most published authors	Publications	Citations
EC #103	Soldering alloys; Electrodeposition; Tin	Sharma A.B., Das K.G., Das S.C.	7 ▲	25
EC #104	Fillers; Carbon black; Composite materials	Naskar K., Sahoo B.P., Tripathy D.K.	16 ▼	102
EC #105	Cryptography; Algorithms; Electronic document identification systems	Karati S., Das A.K., RoyChowdhury D.	6 ▲	4
EC #106	Thyristors; Controllers; Power electronics	Banerjee R., Majumdar G.C., Meena G.S.	7 ▼	16
EC #107	Microscopy, Atomic Force; Erythrocytes; Cell Membrane	Chakraborty C., Mukherjee R.K., Chaudhury K.	7 ▲	25
EC #108	Wear of materials; Machining; Cutting tools	Pal S.K., Mukhopadhyay S., Datta A.	5 ▼	41
EC #109	Waveguides; Photonics; Wavelength	Varshney S.K., Haldar R., Mishra V.V.	11 ▲	9
EC #110	Natural convection; Fluids; Heat transfer	Bhattacharyya S., Das P.K., Basu D.N.	8 ▼	36
EC #111	mycorrhizal fungi; Fungi; Soil	Ghosh A.K., Bhadoria P.B.S., Gill A.A.S.	3 ▲	4
EC #112	flow; turbulence; turbulent flow	Dey S., Bose S.K., Sarkar S.	10 ▼	55
EC #113	Stochastic programming; Optimization; Models	Biswal M.P., Chakravarty D., Barik S.K.	12 ▼	26
EC #114	Porifera; Actinobacteria; Bacteria	Mal D., Mitra P., Ghosh K.	12 ▼	149
EC #115	Cerium compounds; Scanning electron microscopy; X ray diffraction	Majumder S.B., Maity A.K., Ghosh A.K.	7 ▲	26
EC #116	Dielectric materials; Dielectric relaxation; Permittivity	Thakur A.K., Khastgir D.K., Chaki T.	6 ▲	8
EC #117	Graphene; Buckling; Elasticity	Pradhan S.C., Reddy G.K., Mandal U.K.	8 ▼	75
EC #118	Hough transforms; Algorithms; Geometry	Bhowmick P., Biswas R., Mukhopadhyay J.	17 ▲	18
EC #119	Ligands; Magnetic properties; Synthesis (chemical)	Ray D.K., Ghosh A.K., Pait M.	15 ▲	86
EC #120	Fabrication; Photoresists; MEMS	Ganguly P., Dey P.K., Samanta S.	5 ▲	9
EC #121	CMOS integrated circuits; Electric power utilization; Networks (circuits)	Mandal P.K., Bhattacharyya T.K., Mandal D.K.	3 ▼	2

