

Ten Best Publication in order of importance in the field of Infectious Disease Diagnostics and control.

S.N.	Publication Citation	Impact Factor	Citations	Importance
1.	Singh A, Gupta A, Gopinath K, Sharma P, Singh S* . Evaluation of 5 Novel protein biomarkers for the rapid diagnosis of pulmonary and extra-pulmonary tuberculosis: preliminary results. Nature Sc Rep, 2017 ; 7:44121 (1-10).	5.55	16	In this paper we have described 5 novel antigens which we identified as biomarkers for the diagnosis of active tuberculosis. ELISA and RDT based tests were developed which were found to be highly sensitive and specific, particularly to diagnose and predict MDR-TB. The use of these antigens could be a landmark innovation in controlling TB. (Please refer paper No. 5 for basic information of this innovation.)
2.	Singh A, Gopinath K, Sharma P, Bisht D, Sharma P, Singh N, Singh S* . Comparative proteomic analysis of sequential isolates of Mycobacterium tuberculosis from a patient with pulmonary tuberculosis turning from drug sensitive to multidrug resistant. Indian J Med Res 2015 ; 141 (1): 27-45	1.68	43	This is the basic study to identify the novel proteins in the Mycobacterium tuberculosis that overexpress in-vivo during active TB disease and when the mycobacteria starts developing drug resistance. Later on most potential antigens were evaluated on clinical samples (Please refer paper No. 1 for advanced diagnostic evaluation work after this innovative work).
3.	Sivakumar R, Sharma P, Chang KP, Singh S* . Cloning, Expression and Purification of a Novel recombinant antigen from Leishmania donovani. Protein Expr Purif, 2006 , 46:156-165.	1.7	71	In this paper we have described a novel protein using r-DNA technology from Indian strain of Leishmania donovani (KE-16). Using this antigen a rapid card test was prepared and the technology was transferred to M/S Span Diagnostics. The Government of India included these RDT kits in its kala-azar elimination programme. These kits are also now in the panel of WHO recommended RDT kits for visceral leishmaniasis.

4.	Rufai SB, Singh A, Singh J, Kumar P, Sankar MM Singh S* . Diagnostic usefulness of Xpert MTB/RIF assay for detection of tuberculous meningitis using cerebrospinal fluid. J Infection. 2017 ; 75(2): 125-131.	4.441	42	This study indicates that even though Xpert-MTB/Rif is excellent tool for diagnosing PTB, it has limited role in extrapulmonary TB diagnosis, due to low sensitivity.
5.	Gopinath K, Singh S* . Multiplex PCR Assay for Simultaneous Detection and Differentiation of Mycobacterium tuberculosis, M. avium Complexes, and Other Mycobacterial Species Directly from Clinical Specimens. J Applied Microbiol, 2009 ; 107: 425-35	2.56	100	Using a novel set of primers a multiplex PCR was developed to detect and differentiate MTB from M. avium, M. Kansasii and other NTM. This multiplex PCR is rapid and cost effect method to simultaneously diagnosing and differentiating MTB and other NTM using single reaction tube.
6.	Kumar D, Nath L, Kamal MA, Varshney A, Jain A, Singh S , Rao KVS. Genome-Wide Analysis of the Host Molecular Network that regulates Intracellular Survival of Mycobacterium tuberculosis. Cell. 2010 Mar 5; 140(5):731-743.	31.2	349	In this study our group delineated several genomic and proteomic complexities of intracellular MTB survival.
7.	Singh N, Mishra J, Singh R, Singh S* . Animal Reservoirs of Visceral Leishmaniasis in Bihar, India. J Parasitol. 2013 ; 99: 64-7.	1.5	57	This landmark study done on more than 1000 animals (Sheep, goat, cow, buffalo etc) from visceral Leishmaniasis endemic areas of Bihar, showed that animals (specially the goats) have important role as possible reservoirs. The study warns that to eliminate visceral leishmaniasis from the country, this aspect of animal reservoirs must be kept in mind.
8.	Srivastava S, Mishra J, Gupta AK, Singh A, Mishra PS, Singh S* . Laboratory Confirmed Miltefosine Resistant Cases of Visceral Leishmaniasis from India. Parasites & Vectors, 2017 ; 10:49 DOI 10.1186/s13071-017-1969-z.	3.41	87	In this breakthrough and world's first study we isolated and characterized the miltefosin resistant field strains of <i>Leishmania donovani</i> from endemic area of Bihar and Jharkhand. This study has predicted that very soon this drug may not remain effective against VL.

9.	Singh J, Sankar MM, Kumar S, Gopinath K, Singh N, Mani K, <u>Singh S*</u> . Incidence and prevalence of tuberculosis among household contacts of pulmonary tuberculosis patients in a Peri-urban population of South Delhi, India. PLoS One. 2013 ; 8 (7) e69730. doi:10.1371/journal.pone.0069730 .	3.785	53	This was very long and vertical follow up field based study from India, that revealed the dynamics of spread of tuberculosis in close contacts and family members of the index cases. The findings of this study were so compelling to central TB division that contact tracing of all index cases of PTB is now included in the national TB elimination programme.
10.	Rufai SB, Kumar P, Singh A, Prajapati S, Balooni V, <u>Singh S*</u> . Comparison of Xpert MTB/RIF with Line Probe Assay for Detection of Rifampin-Monoresistant Mycobacterium tuberculosis. J Clin Microbiol. 2014 Jun;52(6):1846-52. doi: 10.1128/JCM.03005-13.	4.232	142	This paper describes crucial results with brevity where in, the Xpert MTB/RIF was found to give discordant results with regard to rifampicin resistance. Based on data and reasons of discordance presented in this paper, the manufactures had to develop a more sensitive Ultra- Xpert MTB/RIF.