



Dr. S. Karutha Pandian
Senior Professor & Head

Contact

Address : Department of Biotechnology
Science Campus
Alagappa University
Karaikudi - 630 003
Tamil Nadu, India

Employee Number : 54101

Contact Phone (Office) : +91 4565 225215

Contact Phone (Mobile) : +91 9442318144

Contact e-mail(s) : sk_pandian@rediffmail.com; pandiansk@gmail.com
pandiansk@alagappauniversity.ac.in

Skype id : pandiansk@gmail.com

Academic Qualifications: M.Sc., Ph.D., D.Sc.,

Teaching and Research Experience: 30 years +

At Alagappa University		
Designation	From	To
Reader & Head, Biotechnology	March 11, 2002	May 24, 2005
Professor & Head, Biotechnology	May 25, 2005	May 24, 2015
Senior Professor & Head, Biotechnology (Level 15)	May 25, 2015	Till date

Additional Academic Responsibilities

2006-Till Date : Coordinator: Bioinformatics Infrastructure Facility (funded by DBT, Govt. of India)

2008-2013 : Coordinator: Post M.Sc., Advanced Diploma in Molecular Diagnostics (funded by DBT, Govt. of India)

2002- Till Date: Coordinator: M.Sc., Biotechnology Programme (supported by DBT one time grant)

2009- Till Date: Chairperson of Project Implementation Group, DST-FIST Programme (Level 1-Phase I and II)

2011-2016 : Coordinator: UGC-SAP (DRS-I)

2013-2014 : Coordinator: DST-PURSE Scheme

Additional Administrative Responsibilities

S. No	Position	University Bodies	Period	
			From	To
1	Member of the VC Officiating Committee*	Alagappa University	27.09.2013	04.06.2015
2	Member of the Syndicate*	Alagappa University	22.01.2013	21.01.2016
3	Member of the Finance Committee	Alagappa University	22.12.2014	21.01.2016
4	Member of the Planning Board*	Alagappa University	27.01.2012	26.01.2015
5	Member	Senate, Alagappa University	2002	Till Date
6	Member	Standing Committee on Academic Affairs, Alagappa University	2002	Till Date
7	Dean (Research)	Alagappa University	04.11.2010	19.02.2014
8	Dean: Faculty of Science	Alagappa University	09.05.2013	08.05.2016
9	Director: Science Campus	Alagappa University	27.05.2013	20.02.2017
10	Member, Internal Quality Assurance Cell	Alagappa University	18.07.2006-	08.05.2016
11	Special Officer (Planning & Development)	Alagappa University	14.05.2007-	30.06.2008
12	Warden, PG Men's Hostel	Alagappa University	11.10.2004	09.05.2007
13	Warden, Science Block-Women's Hostel	Alagappa University	18.06.2012	19.02.2014
14	Member	NAAC Steering Committee	2004	2005
15	Member, Building Committee	Alagappa University	25.01.2011	24.01.2014
16	Director, IQAC	Alagappa University	07.07.2017	Till Date

*Nominated by the Governor-Chancellor.

Areas of Research

- **Alternative to Antibiotics:** Exploration of natural sources (which do not exert any Darwinian selection pressure) as anti-quorum sensing and antibiofilm agents against human and aquaculture pathogens.
- **Functional Genomics and Proteomics:** Elucidation of mechanism of action of antibiofilm compounds against bacterial and fungal pathogens through transcriptomic and proteomic approaches.
- **Understanding the molecular basis of Group A Streptococcal pathogenesis.**
- **Microbial Genomics and Molecular Phylogeny:** Molecular cataloguing and bioprospecting of bacterial diversity associated with various ecosystems of Gulf of Mannar and Palk Bay through culture dependent and independent (including metagenomics and metaproteomic) approaches.
- **Translational Biotechnology:** Development and evaluation of biocosmeceuticals and formulations thereof.

Research Supervision / Guidance

Program of Study		Completed	Ongoing
Research	Ph.D.	21	8
Project	PG	82	-
	Post M.Sc., Adv Dip in Molecular Diagnostics	43	-
	UG (B. Tech.)	7	-

Publications

International		National		Others
Journals (SCI)	Conferences	Journals	Conferences	Books / Chapters / Monographs / Manuals
183	189	--	141	Books : 01 Chapters: 21 Reviews : 09 Manuals : 02

Cumulative Impact Factor (as per JCR) : 465.181
h-index : 38
i10 index : 115
Total Citations : 4839

<https://scholar.google.co.in/citations?user=brc-mRAAAAAJ&hl=en>

Patents

S. No.	Title	Inventors	Patent Number	Filing Date	Current Status
1.	A composition comprising of <i>curcuma aromatica</i> oil, and undecanoic acid and uses thereof	Sivasankar Chandran, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	1732/CHE/2015	31.03.2015	Published
2	A composition comprising of embelin, and at least one anti-fungal agent and uses thereof	Sivasankar Chandran, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	1734/CHE/2015	31.03.2015	Published
3	Personal care compositions for Anti-aging	Prasanth Mani Iyer, Balamurugan Krishnaswamy, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	676/KOL/2015	18.06.2015	Published
4	Personal care compositions for Anti-aging	Prasanth Mani Iyer, Balamurugan Krishnaswamy, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	679/KOL/2015	18.06.2015	Published
5	Compositions comprising Green Tea and Naringenin for Anti-aging	Prasanth Mani Iyer, Balamurugan Krishnaswamy, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	677/KOL/2015	18.06.2015	Published
6	Personal care compositions for Anti-aging	Prasanth Mani Iyer, Balamurugan Krishnaswamy, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	680/KOL/2015	18.06.2015	Published

7	Personal care compositions for Anti-aging	Prasanth Mani Iyer, Balamurugan Krishnaswamy, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	766/KOL/2015	15.07.2015	Published
8	Personal care compositions for Anti-aging	Prasanth Mani Iyer, Balamurugan Krishnaswamy, S K Pandian , Gayathri Subramanyam and James Prabhanand Bhaskar	779/KOL/2015	17.07.2015	Published
9	An anti-acne synergistic composition and process thereof	Sivasankar C, S K Pandian and Balamurugan K	Application No. 201641010057	22.03.2016	Published
10	A formulation comprising phytochemicals and applications thereof	Muthamil S, Sivasankar C and Pandian SK	Application No. 2017741011854	31.03.2017	Filed
11	A composition comprising phytochemicals and preparation process thereof	Swetha TK, Sivasankar C and Pandian SK	Application No. 2017741011855	31.03.2017	Filed
12	An antibacterial composition and implementations thereof	Swetha TK, Pandian SK , Sivasankar C, Balamurugan K, Veera Ravi A, Bhaskar JP, Venkateswaran K, Deepa M, Das SS	Application No. 201831008480	07.03.2018	Filed
13	A composition comprising phytochemicals and applications thereof	Swetha TK, Pandian SK , Sivasankar C, Balamurugan K, Veera Ravi A, Bhaskar JP, Venkateswaran K,	Application No. 201831008480	07.03.2018	Filed

		Deepa M, Das SS			
14	A composition comprising phytochemicals and applications thereof	Swetha TK, Pandian SK , Sivasankar C, Balamurugan K, Veera Ravi A, Bhaskar JP, Venkateswaran K, Deepa M, Das SS	Application No. 201831008480	07.03.2018	Filed
15	Antibacterial composition and uses thereof	Swetha TK, Pandian SK , Sivasankar C, Balamurugan K, Veera Ravi A, Bhaskar JP, Venkateswaran K, Deepa M, Das SS	Application No. 201831008480	07.03.2018	Filed
16	Phytochemical formulations against Early Mortality Syndrome (EMS)	Ravi AV, Santhakumari S, Durgadevi R, Alexpandi R and Pandian SK	Application No. 201841010325	21.03.2018	Filed
17	Phytochemical formulations against Early Mortality Syndrome (EMS)	Ravi AV, Santhakumari S, Durgadevi R, Alexpandi R and Pandian SK	Application No. 201841010346	21.03.2018	Filed
18	Composition exhibiting Antibiofilm and Antihyphal activity	Prasath GK, Pandian SK	Application No. 201941007130	22.02.2019	Filed

RESEARCH /CONSULTANCY PROJECTS CARRIED OUT AS PI/PROJECT COORDINATOR

Sl. No.	Funding Agency	Title of the Project and Reference Number	Duration	Amount in lakh Rs.
1	CSIR (NMITLI)	Identification and cataloguing of microflora in skin by 16S rRNA gene typing, RAPD and multilocus DNA fingerprinting (under Biotechnology for Leather: Towards Cleaner Processing) - Phase I. (Ref. No. 5/258/13/2001-NMITLI dated 31.03.2002)	2002-2005	24.690

2	DCI*	Environmental Impact Monitoring (EIM) of Sethusamudram Ship Channel Project (SSCP) (Microbiological Parameters) (Ref. No. DCI/OPS/LC/SSCP/2005 dated 23.06.2005)	06/2005 to 10/2005	71.580
3	CSIR (NMITLI)	Further evaluation and formulation of natural and synthetic products for preservation of goat skin and evaluation and validation of marine bacterial enzymes for application in leather industry. Phase II. (Ref. No. 5/258/13/2002-NMITLI dated 02.01.2006).	2006-2011	32.280
4	DBT**	Evaluation of bacterial diversity associated with the coral <i>Acropora digitifera</i> by 16S rRNA gene sequences and screening for antiviral activity against the aquaculture pathogen blotched snakehead virus (BSNV). (Ref. No. BT/PR3987/ AAQ/03/198/2003 dated 22.09.2006).	2006 -2009	36.315
5	UGC	Screening and molecular characterization of Group A Streptococcus by 16S rDNA sequencing and Emm protein serotyping (Ref. No: F.No.34-263/2008 (SR) dated 31.12.08)	2009 -2012	10.472
6	DBT	Bioprospecting marine microbial wealth through metagenomics. (Ref. No. BT/PR99114/NDB/52/134/09 dt 13.09.2010).	2010 -2013	49.36
7	ITC	Part-I: Antimicrobials from marine sources & Part-II: Anti-aging: Role of "Target Genes".	2011-2014	40.63
8	ICMR	Gene expression and protein profiling of Group A Streptococcus upon treatment with quorum quenching agents from marine bacteria (Sanction No. 58/20/2011-BMS dated 19.03.2012)	2012-2015	22.01525
9	CSIR	Production, purification and characterization of α -amylase from marine sediment bacterium <i>Bacillus subtilis</i> S8-18 and its evaluation for antibiofilm activity against human pathogens (Sanction No. 37(1552)/12/EMR-II dated 03.07.2012)	2012-2015	21.42
10	DBT***	Antipathogenic potential of marine cyanobacteria in preventing quorum sensing dependent bacterial infections among aquaculture organisms (Sanction No. BT/PR4815/AAQ/3/587/2012 dated 29.09.2012)	2012-2015	55.09915
11	AERB	Studies on microbial diversity and ecology in the vicinity of a coastal nuclear power plant in relation to water quality and nutrients. (AERB/CSRP/Proj. No. 60/10/2105 dated 13 April 2015)	2015-2019	41.03623
12	DBT (Network)	Programme support on Biotechnology Approaches for Conservation and Sustainable Utilization of Plant Wealth of Western Ghats. Component B: Bioprospecting and Basic Biology. Project B5: Characterization, recombinant expression, process scale up and validation of selected hydrolases from native actino-bacteria for commercial exploitation.	2015-2020	39.20

		(BT/PR12720/COE/34/21/2015 dated 14.05.2015)		
13	ITC	Part I: Natural actives & Part-II: <i>In vivo</i> models for health and hygiene application	2016-2019	83.60

* As a joint venture with the Department of Industrial Chemistry and Department of Oceanography and Coastal Area Studies.

** In collaboration with Fisheries College and Research Institute (Tamil Nadu Veterinary and Animal Sciences University), Thoothukkudi 628 008.

*** In collaboration with Department of Microbiology, Bharathidasan University, Tiruchirappalli 620 024.

FUNDS RECEIVED FOR OTHER SCHEMES AS COORDINATOR/GROUP LEADER:

Sl. No.	Funding Agency	Title of the Scheme and Reference Number	Duration	Amount in lakh Rs.
1	DBT	Bioinformatics Infrastructure Facility (As Coordinator) (Sanction No. BT/BI/04/055/2001 dated 22.09.06; 14.09.07, 24.06.08, 04.08.09, 16.11.09, 11.08.10, 23.08.11 and BT/BI/25/015/2012 19.09.12 and BT/BI/25/015/2012(BIF) 28.01.14 ; BT/BI/25/015/2012 (BIF) 12.09.14; BT/BI/25/015/2012(BIF) 14.12.15; BT/BI/25/015/2012(BIF) 07.02.17; BT/BI/25/015/2012(BIF) 30.12.17 BT/BI/25/015/2012(BIF) 16.02.18 BT/BI/25/015/2012(BIF)20.09.2018	2006-	146.949
2	DBT	Post M.Sc., Advanced Diploma in Molecular Diagnostics (As Course Coordinator) (Ref. No. DCI/OPS/LC/SSCP/2005 dated 23.06.2005)	2008-2013	104.325
3	DST	FIST (Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions) -Level I (As Programme Coordinator) (Sanction No. SR/FST/LSI-087/2008 dated 09.01.09)	2009-2014	44.50
4	DBT	M.Sc., Biotechnology Programme (As Course Coordinator) (Sanction No. BT/HRD/01/04/2009 dated 05.10.09 and 19.09.12) (One Time Grant)	2009	35.00
5	UGC	SAP (DRS-I) (As Coordinator) (Sanction No: F. 3-28/2011 (SAP-II) dated 01.04.2011)	2011 - 2016	75.88532
6	DST	DST-PURSE (As Coordinator) (Sanction No: SR/S9/Z-23/2010/42(C) dated 24 th May 2011)	2011-2014	600.00
7	DST	FIST (Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions) -Level I -Phase II (As Programme	2016-2021	121.00

		Coordinator) (Sanction No. SR/FST/LSI-639/2015(C) dated 02.06.2016)		
8	UGC	SAP (DRS-II) (As Coordinator) (Sanction No: F. 5-1/2018/DRS-II (SAP-II) dated 19.04.2018	2018 - 2023	132.00

Distinctive Achievements / Awards

S. No	Award	Awarded by	Field/Category for which the award was given	Year of Award
1	Malaviya Memorial Award for Senior Faculty -2017 (Certificate, Citation, Memento and Cash award of Rs. 15000)	Biotech Research Society, India (BRSI)	Outstanding contribution in the field of Medical Microbiology and Microbial Biotechnology	2018
2	UGC-BSR Mid-Career Award (Rs. 1000000)	UGC, New Delhi	For having guided 15 Scholars successfully for Ph.D.	2018
3	Professor of Excellence (Certificate, Gold Medal and Cash award of Rs. 25000)	Alagappa University, Karaikudi	For excellent academic contribution for more than a decade as a Professor	2018
4	Appreciation Award (Certificate and Cash award of Rs. 20000)	Alagappa University, Karaikudi	In recognition of having received TANSA	2018
5	Shri. PK Das Memorial Lifetime Achievement Award - 2016 (Certificate, Citation and Cash award of Rs. 25000)	Nehru Group of Institutions, Coimbatore	Outstanding contribution in the field of Education	2016
6	Alagappa Excellence Award for Research (2015-2016) (Certificate, Citation and Gold Medal and Cash award of Rs. 15000)	Alagappa University, Karaikudi	Biotechnology	2016
7	Tamil Nadu Scientist Award (Certificate, Citation and Cash award of Rs. 25000)	Tamil Nadu State Council for Science and Technology, Chennai	Biological Sciences	2012
8	Shri. PK Das Memorial Best Faculty Award (Certificate, Citation and Cash award of Rs. 10000)	Nehru Group of Institutions, Coimbatore	Biotechnology (Senior Category)	2012
9	Recipient of the Certificate of Achievement and Cash award of Rs. 10000	Alagappa University, Karaikudi	Academic Performance in the areas of Research Publication and Generation of Research Grants under	2006

			Performance Linked Incentive Scheme	
School Topper in Secondary School Leaving Certificate (SSLC), P. K. Government High School, Mullikulam, Tirunelveli District, April 1978 (Register No.313118)				

Events organized in leading roles

Number of Seminars / Conferences / Workshops / Events organized: **19**

Overseas Exposure / Visits

1. Germany
2. Japan
3. Malaysia
4. People's Republic of China
5. Portugal
6. Switzerland
7. Taiwan
8. Thailand
9. The Netherlands
10. United Kingdom

Membership in Professional Bodies

Professional Bodies

1. Life Member (1699-2005): Association of Microbiologists of India
2. Life Member: Society of Biological Chemists, India
3. Life Member (L14558): The Indian Science Congress Association
4. Life Member: Proteomics Society, India
5. Life Member (LM1664): The Biotech Research Society, India

Fellowship in Academies

1. Elected Fellow of the The Academy of Sciences, Chennai

Editorial Board

S. No	Position	Name	Period	
			From	To
1	Editor	Indian Journal of Microbiology (Springer) (2016 Impact Factor: 1.143)	Jan 2011	Till Date
2	Editor	Journal of Medical Microbiology [Society for General Microbiology, UK]. (Impact Factor: 2.159).	April 2017	Till Date
3	Editor	Research Journal of Biological Sciences (ISSN:0974-4177)	2008	Till Date

Reviewer for more than 25 SCI Journals.

Advisory Board

19.02.2015- Till Date: External Member in Research Committee, Bharathidasan University
22.08.2016-Till Date : Member of the Advisory Committee for the Centre "National Centre for Alternatives to Animal Experiments " at Bharathidasan University, Tiruchirappalli under the

scheme “Centre with Potential for Excellence in Particular Area (CPEPA) (nominated by the Chairman, University Grants Commission (UGC))

06.09.2017- Till Date: Member, Research Advisory Board, Aravind Medical Research Foundation, Madurai

09.03.18 onwards: External Member, Board of Research Studies, Periyar University, Salem 636 011.

Academic Bodies (such as Board of Studies etc.,)

Membership in Board of Studies /Expert Committee/Selection Committee in Autonomous Colleges/Other Universities: **70**

Resource persons in various capacities

SPECIAL & INVITED LECTURES DELIVERED : **89**

GARDUATION DAY ADDRESSES DELIVERED : **2**

Others

1. Articles published in Newspapers / Magazines : **1**

2. Popularization of Science through media

- All India Radio, Madurai broadcast a 15 min Talk on “Forensic Science” on 05.07.2003 at 07:30AM.
- A 30 min programme on “DNA fingerprinting” was broadcast on 20.07.2003 at 09:00 AM as part of Popularization of Biotechnology by the All India Radio, Madurai. This programme was produced by Vigyan Prachar (New Delhi), AIR (Madurai) and Tamil Nadu Science Forum (Madurai).

3. Products developed : **02**

4. No. of PhD Thesis evaluated : **37**

5. No. of PhD Public Viva Voce Examination conducted : **47**

6. Sequences submitted in

1. GenBank

- 16S rRNA gene sequences : **645**
- ITS region sequences : **29**
- *emm* gene sequences : **34**
- ESBL gene sequences : **20**
- *rpoB* gene sequences : **6**

2. Metagenomic clone derived gene sequences : **2**

3. Complete sequence of plasmid submitted in GenBank : **1**
(Novel cryptic plasmid pRK10 from *Serratia marcescens*; Plasmid 62:183-190).

4. European Nucleotide Archive (ENA): : **53**
(V3 Hypervariable regions of 16S rRNA gene sequences of epibacterial community from seaweeds and sediments).

Recent Research Publications in SCI Journals

1. Durgadevi R, Ravi AV, Alexpandi R, Swetha TK, Abirami G, Vishnu S and **Pandian SK** (2019). Virulence targeted inhibitory effect of linalool against the exclusive uropathogen *Proteus mirabilis*. *Biofouling* [Taylor & Francis, UK] (Impact Factor: 2.786) DOI:10.1080/08927014.2019.1619704 (in press).
2. Sadeer NB, Mahomoodally MF, Zengin G, Jeewon R, Nazurally N, Kannan RRR, Albuquerque RDDG, **Pandian SK** (2019) Ethnopharmacology, phytochemistry, and global distribution of mangroves- a comprehensive review. *Marine Drugs* [MDPI], Accepted on 26.03.2019 (Impact Factor: 4.379)
3. Rengasamy KRR, Khan H, Ahmad I, Lobine D, Mahomoodally F, Suroowan S, Hassan STS, Xu S, Patel S, Daglia M, Nabavi SM, **Pandian SK** (2019) Bioactive peptides and proteins as alternative antiplatelet drugs. *Medicinal Research Reviews* [Wiley Periodicals, Inc., U.S.A], DOI: 10.1002/med.21579 (Impact Factor: 8.29).
4. Meora R, Sushmitha TJ, Rao TS and **Pandian SK** (2019). Culture dependent and independent analysis and appraisal of early stage biofilm-forming bacterial community composition in the Southern coastal seawater of India. *Science of the Total Environment* [Elsevier] doi.org/10.1016/j.scitotenv.2019.02.171 (Impact Factor: 4.610) (In Press).
5. Sivaranjani M, Leskinen K, Aravindraja C, Saavalainen P, **Pandian SK**, Skurnik M and Ravi AV (2018). Deciphering the antibacterial mode of action of alpha-mangostin on *Staphylococcus epidermidis* RP62A through an integrated transcriptomic and proteomic approach. *Frontiers in Microbiology*, section Antimicrobials, Resistance and Chemotherapy [Frontiers Research Foundation, Switzerland] (Impact Factor: 4.019) (In Press).
6. Chokpaisarn J, Yincharoen K, Sanpinit S, **Pandian SK**, Nandhini JR, Gowrishankar S, Limsuwan S, Kunworarath N, Voravuthikunchai SP and Chusri S (2019) Effects of a traditional Thai polyherbal medicine -Ya-Samarn-Phlaeø as a natural anti-biofilm agent against *Pseudomonas aeruginos*. *Microbial Pathogenesis* [Elsevier] 128:354-362 (Impact Factor: 2.322).
7. Kannappan A, Balasubramaniam B, Ranjitha R, Srinivasan R, Packiavathy IASV, Balamurugan K, **Pandian SK** and Ravi AV (2019). Exploiting the effect of geraniol-cefotaxime combination against the *in vitro* and *in vivo* biofilm formation of *Staphylococci* sp. *Food and Chemical Toxicology*, [Elsevier, The Netherlands] (Impact Factor: 3.977) (In Press).
8. Muthamil S, Balasubramaniam B, Balamurugan K and **Pandian SK** (2018). Synergistic effect of quinic acid derived from *Syzygium cumini* and undecanoic acid against *Candida* spp. biofilm and virulence. *Frontiers in Microbiology*, section Antimicrobials, Resistance and Chemotherapy [Frontiers Research Foundation, Switzerland] (Impact Factor: 4.019).
9. Gowrishankar S, **Pandian SK**, Balasubramaniam B and Balamurugan K (2018). Quorum quelling efficacy of marine cyclic dipeptide -cyclo(L-leucyl-Lprolyl) against the uropathogen *Serratia marcescens*. *Food and Chemical Toxicology* [Elsevier] 123:326-336 (Impact Factor: 3.977).

10. Santhakumari S, Jayakumar R, Logalakshmi R, Prabhu NM, Nazar AK, **Pandian SK**, Ravi AV (2018). *In vitro* and *in vivo* effect of 2, 6-Di-tert-butyl-4-methylphenol as an antibiofilm agent against quorum sensing mediated biofilm formation of *Vibrio* spp. [International Journal of Food Microbiology](#) [Elsevier] (Impact Factor:3.339) (In press).
11. Rengasamy KRR, Khan H, Gowrishankar S, Lagoa RJL, Mahomoodally FM, Khan Z, Suroowan S, Tewari D, Zengin G, Hassan STS and **Pandian SK** (2018). The role of flavonoids in autoimmune diseases: Therapeutic updates. [Pharmacology & Therapeutics](#). pii: S0163-7258(18)30174-8. doi: 10.1016/j.pharmthera.2018.09.009 [Elsevier] (Impact Factor: 10.376).
12. Teshika JD, Zakariyyah AM, Zaynab T, Zengin G, Rengasamy KRR, **Pandian SK** & Fawzi MM (2018). Traditional and modern uses of onion bulb (*Allium cepa* L.): a systematic review. [Clinical Reviews in Food Science and Nutrition](#) doi.org/10.1080/10408398.2018.1499074 [Taylor & Francis, UK] (Impact Factor: 6.015).
13. Rubini D, Banu SF, Vedahari BN, Ramyadevi D, Gowrishankar S, **Pandian SK** and Nithyanand P (2018). Chitosan extracted from marine biowaste mitigates staphyloxanthin production and biofilms of Methicillin- resistant *Staphylococcus aureus*. [Food and Chemical Toxicology](#) [Elsevier] (Impact Factor: 3.977).
14. Fang J, Chen Q, He B, Cai J, Yao Y, Cai Y, Xu S, Rengasamy KRR, Gowrishankar S, **Pandian SK** & Cao T (2018). Tanshinone IIA attenuates TNF- α induced PTX3 expression and monocyte adhesion to endothelial cells through the p38/NF- κ B pathway. [Food and Chemical Toxicology](#) doi: 10.1016/j.fct.2018.09.063 [Elsevier] (Impact Factor: 3.977).
15. Salini R and **Pandian SK** (2018). Synergistic antibiofilm efficacy of undecanoic acid and auxins against quorum sensing mediated biofilm formation of luminescent *Vibrio harveyi*. [Aquaculture](#) [Elsevier] (Accepted) (Impact Factor: 2.710).
16. Rajalaxmi M, Shafreen RB, Chithiraiselvi K and **Pandian SK** (2018). An *in vitro* and *in silico* identification of antibiofilm small molecules from seawater metaclone SWMC166 against *Vibrio Cholerae* O1. [Molecular and Cellular Probes](#) [Elsevier, USA] (Impact Factor: 1.403). (in press).
17. Muthuramalingam P, Krishnan SR, Pandian S, Mareeswaran N, Aruni W, **Pandian SK** and Ramesh M (2018). Global analysis of threonine metabolism genes unravel key players in rice to improve the abiotic stress tolerance. [Scientific Reports](#) [Nature Publishing Group, UK] 8(1), 9270. (Impact Factor: 4.259)
18. Banu SF, Rubini D, Murugan R, Vadivel V, Gowrishankar S, **Pandian SK** and Nithyanand P (2018). Exploring the antivirulent and sea food preservation efficacy of Essential oil combined with DNase on *Vibrio parahaemolyticus*. [LWT - Food Science and Technology](#) [Elsevier, USA] (Impact Factor: 2.329) (in press).
19. Sivaranjani M, Srinivasan R, Aravindraja C, **Pandian SK** and Ravi AV (2018). Morin inhibits biofilm production and reduces the virulence of *Listeria monocytogenes* -An *in vitro* and *in vivo* approach. [Biofouling](#) [Taylor & Francis, UK] (Impact Factor: 3.080) (in press).
20. Hassan STS, Svajdenka E, Rengasamy KRR, Melicharkova R and **Pandian SK** (2018). The metabolic profile of essential oils and assessment of anti-urease activity of ESI-mass spectrometry of *Salvia officinalis* L. [South African Journal of Botany](#) [Elsevier] (Impact Factor: 1.427) (in press).

21. Vigneshwari L, Balasubramaniam B, Sethupathy S, **Pandian SK** and Balamurugan K (2018). O-GlcNAcylation confers protection against *Staphylococcus aureus* infection in *Caenorhabditis elegans* through ubiquitination. [RSC Advances](#) [Royal Society of Chemistry] (Impact Factor.3.108) (in press).
22. Pandian S, Marichelvam K, Satish L, Ceasar SA, **Pandian SK** and Ramesh M (2018). SPAR markers assisted assessment of genetic diversity and population structure in finger millet (*Eleusine coracana* (L.) Gaertn) mini core collection. [Journal of Crop Science and Biotechnology](#) (Springer).
23. Banu SF, Rubini D, Shanmugavelan P, Murugan R, Gowrishankar S, **Pandian SK** and Nithyanand P (2018). Effect of patchouli and cinnamon essential oil on biofilm and hyphae formation by *Candida* spp. [Journal de Mycologie Médicale](#) [Elsevier] (Impact Factor: 1.269).
24. Srinivasan R, Kannappan A, Sivasankar C, Rathika S, **Pandian SK** and Ravi AV (2018). Biofilm inhibitory efficiency of phytol in combination with cefotaxime against nosocomial pathogen *Acinetobacter baumannii*. [Journal of Applied Microbiology](#) [Society of Applied Microbiology, Wiley Online Library] (Doi:10.1111/jam.13741) (Impact Factor:2.009).
25. Durgadevi R, Srinivasan R, Kannappan A, Ponraj GJ, **Pandian SK** and Ravi AV (2018). Phytosynthesized silver nanoparticles as anti-quorum sensing and antibiofilm agent against the nosocomial pathogen *Serratia marcescens*: an *in vitro* study. [Journal of Applied Microbiology](#) [Society of Applied Microbiology, Wiley Online Library] (Accepted Article, In Press) (Impact Factor: 2.099).
26. Sethupathy S, Ananthi S, Selvaraj A, Shanmuganathan B, Vigneshwari L, Balamurugan K, Mahalingam S and **Pandian SK** (2017). Vanillic acid from *Actinidia deliciosa* impedes virulence in *Serratia marcescens* by affecting S-layer, flagellin and fatty acid biosynthesis proteins. [Scientific Reports](#) [Nature Publishing Group, UK] 2017 Nov 27;7(1):16328. doi: 10.1038/s41598-017-16507-x (Impact Factor: 4.259).
27. Muthamil S, Devi VA, Balasubramaniam B, Balamurugan K and **Pandian SK** (2017) Green synthesized silver nanoparticles demonstrating enhanced *in vitro* and *in vivo* antibiofilm activity against *Candida* spp. [Journal of Basic Microbiology](#) [Wiley] (Impact Factor: 1.438) (Accepted) .
28. Srinivasan R, Mohankumar R, Kannappan A, Raja KV, Archunan G, **Pandian SK**, Ruckmani K and Ravi AV (2017). Exploring the anti-quorum sensing and antibiofilm efficacy of phytol against *Serratia marcescens* associated acute pyelonephritis infection in Wistar rats. [Frontiers in Cellular and Infection Microbiology](#) [Frontiers, Research Foundation, Switzerland] 7:498. doi: 10.3389/fcimb.2017.00498 (Impact Factor: 4.3).
29. Subramenium GA, Swetha TK, Prasanth MI, Balamurugan K and **Pandian SK** (2018). 5-hydroxymethyl-2-furaldehyde from marine bacterium *Bacillus subtilis* inhibits biofilm and virulence of *Candida albicans*. [Microbiological Research](#) [Elsevier, USA] 207:19-32 (Impact Factor: 3.037).
30. Gowrishankar S and **Pandian SK** (2017). Modulation of *Staphylococcus epidermidis* (RP62A) extracellular polymeric layer by marine cyclic dipeptide-cyclo(L-leucyl-L-prolyl) thwarts biofilm formation. [BBA Biomembranes](#) [Elsevier] 1859: 1254-1262 (Impact Factor: 3.687).
31. Sethupathy S, Vigneshwari L, Valliammai A, Balamurugan K and **Pandian SK** (2017). L-Ascorbyl 2, 6-Dipalmitate inhibits biofilm and virulence in methicillin-resistant *Staphylococcus aureus* and prevents triacylglyceride accumulation in *Caenorhabditis elegans*. [RSC Advances](#) [Royal Society of Chemistry, UK] 7:23392-2340 (Impact Factor.3.289).
32. Sivasankar C, Gayathri S, Bhaskar JP, Krishnan V and **Pandian SK** (2017). Embelin as a promising antagonistic agent targeting secreted lipase and its synergistic effect with

- ketoconazole against *Malassezia* spp. [Microbial Pathogenesis](#) [Elsevier] 110:66-72 (Impact Factor: 2.009).
33. Aravindraja C, Valliammai A, Viszwapriya D and **Pandian SK** (2017). Quorum sensing mediated virulence inhibition of an opportunistic human pathogen *Serratia marcescens* from unexplored marine sediment of Palk Bay through function driven metagenomic approach. [Indian Journal of Experimental Biology](#) [NISCAIR, CSIR, India] 55:448-452 (Impact Factor: 1.165).
 34. Viszwapriya D, Subramenium GA, Radhika S and **Pandian SK** (2017). Betulin inhibits cariogenic properties of *Streptococcus mutans* by targeting *vicRK* and *gtf* genes. [Antonie van Leeuwenhoek Journal of Microbiology](#) [Springer] 110:153-165 (Impact Factor: 2.137).
 35. Santhakumari S, Nilofernisha NM, Ponraj JG, **Pandian SK** and Ravi AV (2017). *In vitro* and *in vivo* exploration of palmitic acid from *Synechococcus elongatus* as an antibiofilm agent on the survival of *Artemia franciscana* against virulent vibrios. [Journal of Invertebrate Pathology](#) [Elsevier] 150: 21-31 (Impact Factor: 2.379).
 36. Kannappan A, Gowrishankar S, Srinivasan R, **Pandian SK** and Ravi AV (2017). Antibiofilm activity of *Vetiveria zizanioides* root extract against methicillin-resistant *Staphylococcus aureus*. [Microbial Pathogenesis](#) [Elsevier].110:313-324 (Impact Factor: 2.009).
 37. Kannappan A, Sivaranjani M, Srinivasan R, Rathna J, **Pandian SK** and Ravi AV (2017). Inhibitory efficacy of geraniol on biofilm formation and development of adaptive resistance in *Staphylococcus epidermidis* RP62A. [Journal of Medical Microbiology](#) [Society for General Microbiology, UK] 66:1506-1515. doi: 10.1099/jmm.0.000570 (Impact Factor: 2.159).
 38. Satish L, Snthakumari S, Gowrishankar S, **Pandian SK**, Ravi AV and Ramesh M (2017) Rapid biosynthesized AgNPs from *Gelidiella acerosa* aqueous extract mitigates quorum sensing mediated biofilm formation of *Vibrio* species—an *in vitro* and *in vivo* approach. [Environmental Science and Pollution Research](#) (Springer, The Netherlands) 24:27254-27268. doi: 10.1007/s11356-017-0296-4 (Impact Factor: 2.741).
 39. Bai NS, Sasidharan TO, Remadevi OK, Dharmarajan P, **Pandian SK** and Balaji K (2017) Morphology and RAPD analysis of certain potentially entomopathogenic isolates of *Metarhizium anisopliae* Metsch.(Deuteromycotina: Hypocreales). [Journal of Microbiology and Biotechnology Research](#) 5:34-40.
 40. Malar DS, Shafreen RB, **Pandian SK** and Devi KP (2017). Cholinesterase inhibitory, anti-amyloidogenic and neuroprotective effect of the medicinal plant *Grewia tiliaefolia* - An *in vitro* and *in silico* study. [Pharmaceutical Biology](#) [Informa Healthcare] 55: 381-393 (Impact Factor: 1.241).
 41. Farisabanu S, Rubini D, Rakshithaa S, Kamaraj CS, Wilson A, Gowrishankar S, **Pandian SK**, Murugan R, Nithyanand P (2017). Antivirulent properties of underexplored Cinnamomum tamala essential oil and its synergistic effects with DNase against *Pseudomonas aeruginosa* biofilms - an *in vitro* study. [Frontiers in Microbiology](#) [Lausanne: Frontiers Research Foundation, Switzerland] 8:1144 (Impact Factor: 4.165).
 42. Nithyanand P, **Pandian SK**, Kushmaro A, Supayang V and Wilson A (2017) Recent Advances in Biofilmology and Antibiofilm Measures. [BioMed Research International](#). vol. 2017, Article ID 5409325, 2 pages, doi:10.1155/2017/5409325 (Impact Factor: 2.134).
 43. Sivaranjani M, Prakash M, Gowrishankar S, Rathna J, **Pandian SK** and Ravi AV (2017). *In vitro* activity of alpha-mangostin in killing and eradicating *Staphylococcus epidermidis* RP62A biofilms. [Applied Microbiology and Biotechnology](#) [Springer, Germany] 101: 3349-3359 (Impact Factor: 3.376).
 44. Srinivasan R, Devi KR, Kannappan A, **Pandian SK** and Ravi AV (2016). *Piper betle* and its bioactive metabolite phytol mitigates quorum sensing mediated virulence factors and biofilm

- of nosocomial pathogen *Serratia marcescens* *in vitro*. [Journal of Ethnopharmacology](#) [Elsevier] 193:592-603 (Impact Factor: 3.055).
45. Viswapriya D, Subramenium GA, Prithika U, Balamurugan K and **Pandian SK** (2016). Betulin inhibits virulence and biofilm of *Streptococcus pyogenes* by suppressing *ropB* core regulon, *sagA* and *dltA*. [Pathogens and Disease](#) [Formerly FEMS Immunology & Medical Microbiology] [Oxford University Press] 74 (7) (Impact Factor: 2.483). DOI:10.1093/femspd/ftw088.
 46. Gowrishankar S, Kamaladevi A, Balamurugan K and **Pandian SK** (2016). *In vitro and in vivo* biofilm characterization of methicillin-resistant *Staphylococcus aureus* from patients associated with pharyngitis infection. [BioMed Research International](#) [Hindawi] vol. 2016, 14 pages, Article ID 1289157 <http://dx.doi.org/10.1155/2016/1289157> (Impact Factor: 2.134).
 47. Sivaranjani M, Gowrishankar S, Kamaladevi A, **Pandian SK**, Balamurugan K and Ravi AV (2016). Morin inhibits biofilm production and reduces the virulence of *Listeria monocytogenes* -An *in vitro* and *in vivo* approach. [International Journal of Food Microbiology](#) [Elsevier] 237:73-82 (Impact Factor: 3.445)
 48. Rathna J, Bakkiyaraj D and **Pandian SK** (2016). Antibiofilm mechanism of 3, 5 Di tertiary butyl phenol against clinically relevant fungal pathogens. [Biofouling](#) [Taylor & Francis, UK] 32: 979-993 (Impact Factor: 3.415).
 49. Viswapriya D, Prithika U, Deebika S, Balamurugan K and **Pandian SK** (2016). *In vitro* and *in vivo* antibiofilm potential of 2,4-Di-tert-butylphenol from seaweed surface associated bacterium *Bacillus subtilis* against Group A Streptococcus. [Microbiological Research](#) 191:19-31 [Elsevier, USA] (Impact Factor: 2.561).
 50. Sethupathy S, Prasath KG, Ananthi S, Mahalingam S, Balan SY and **Pandian SK** (2016). Proteomic analysis reveals modulation of iron homeostasis and oxidative stress response in *Pseudomonas aeruginosa* PA01 by curcumin inhibiting quorum sensing regulated virulence factors and biofilm production. [Journal of Proteomics](#) 145: 112-126 [Elsevier] (Impact Factor: 3.888).
 51. Rathna J, Ajilda AK, Yazhini B, Prabu HG and **Pandian SK** (2016). Production of naphthoquinones and phenolics by a novel isolate *Fusarium solani* PSC-R of Palk Bay and their industrial applications. [Bioresource Technology](#) [Elsevier] 213:289-298 (Impact Factor: 4.494).
 52. Rajalaxmi M, Amsa Devi V and **Pandian SK** (2016). *In vitro* evaluation of indole-3-carboxaldehyde on *Vibrio parahaemolyticus* biofilms. [Biologia](#) (section Cellular and Molecular Biology) [Springer, Slovakia] 71: 247-255 (Impact Factor: 0.827).
 53. Muthamil S and **Pandian SK** (2016). Inhibitory effect of *Murraya koenigii* against *Candida albicans* virulence and biofilm development. [Biologia](#) (section Cellular and Molecular Biology) [Springer, Slovakia] 71: 256-264 (Impact Factor: 0.827).
 54. Gowrishankar S, Sivaranjani M, Kamaladevi A, Ravi AV, Balamurugan K and **Pandian SK** (2016) Cyclic dipeptide-cyclo (L-leucyl-L-prolyl) from marine *Bacillus amyloliquefaciens* mitigates biofilm formation and virulence in *Listeria monocytogenes*. [Pathogens and Disease](#) [Formerly FEMS Immunology & Medical Microbiology] [Oxford University Press, UK] 74 (4) doi: 10.1093/femspd/ftw017 (Impact Factor: 2.403).
 55. Sivasankar C, Maruthupandiyam S, Balamurugan K, Bhaskar JP, Krishnan V and **Pandian SK** (2016). A combination of ellagic acid and tetracycline inhibits biofilm formation and associated virulence of *Propionibacterium acnes* *in vitro* and *in vivo*. [Biofouling](#) [Taylor & Francis, UK] 32:397-410 (Impact Factor: 3.415).
 56. Rajalaxmi M, Shafreen RB, Iyer PM, Vino RS, Balamurugan K and **Pandian SK** (2016). *In silico, in vitro* and *in vivo* investigations of indole-3-carboxaldehyde identified from the seawater bacterium *Marinomonas* sp. as an antibiofilm agent against *Vibrio cholera* O1. [Biofouling](#) [Taylor & Francis, UK] 32:1-12 (Impact Factor: 3.415).

57. Nisha SA, Shafreen RB, **Pandian SK** and Devi KP (2016). Neuroprotective effect of the marine macroalga *Gelidiella acerosa*: Identification of active compounds through bioactivity guided fractionation. [Pharmaceutical Biology](#) [Informa Healthcare] 54:2073-2081 (Impact Factor: 1.241).
58. Gowrishankar S, Kamaladevi A, Ayyanar KS, Balamurugan K and **Pandian SK** (2016). *Bacillus amyloliquefaciens*-secreted cyclic dipeptide- cyclo (L-Leucyl- L-Prolyl) inhibits biofilm and virulence in methicillin-resistant *Staphylococcus aureus*. [RSC Advances](#) [Royal Society of Chemistry, UK] 5: 95788-95804 (Impact Factor.3.84).
59. Sethupathy S, Shanmuganathan B, Devi KP and **Pandian SK** (2016). Alpha-bisabolol from brown macroalga *Padina gymnospora* mitigates biofilm formation and quorum sensing controlled virulence factor production in *Serratia marcescens*. [Journal of Applied Phycology](#) [Springer] 28:1987-1996 (Impact Factor :2.559).
60. Sethupathy S, Nithya C and **Pandian SK** (2015). 2-furaldehyde diethyl acetal from tender coconut water (*Cocos nucifera* L: Areaceae) attenuates biofilm formation and quorum sensing-mediated virulence of *Chromobacterium violaceum* and *Pseudomonas aeruginosa*. [Biofouling](#) [Taylor & Francis, UK] 31: 721-733 (Impact Factor: 3.415).
61. Padmavathi AR, Bakkiyaraj D, Thajuddin N and **Pandian SK** (2015). Effect of 2, 4-di-tert-butylphenol on the growth and biofilm formation of an opportunistic fungus *Candida albicans*. [Biofouling](#) [Taylor & Francis, UK] 31:565-574 (Impact Factor: 3.415).
62. Sivasankar C, Ponmalar A, Bhaskar JP and **Pandian SK** (2015). Glutathione as a promising Anti-Hydrophobicity agent against *Malassezia* spp. [Mycoses](#) [Wiley] 58:620-631 (Impact Factor: 2.239).
63. Subramenium GA, Vijayakumar K and **Pandian SK** (2015). Limonene inhibits streptococcal biofilm formation by targeting surface associated virulence factors. [Journal of Medical Microbiology](#) [Society for General Microbiology, UK] 64: 879-890 (Impact Factor: 2.266).
64. Nithyanand P, Beema Shafreen RM, Muthamil S and **Pandian SK** (2015). Usnic acid inhibits biofilm formation and virulent morphological traits of *Candida albicans*. [Microbiological Research](#) [Elsevier, USA] 179: 20-28 (Impact Factor: 2.561).
65. Salini R and **Pandian SK** (2015). Interference of quorum sensing in urinary pathogen *Serratia marcescens* by *Anethum graveolens*. [Pathogens and Disease](#) [Formerly FEMS Immunology & Medical Microbiology] [Wiley-Blackwell, UK] vol.73; Issue 6. DOI: <http://dx.doi.org/10.1093/femspd/ftv038> (Impact Factor: 2.554).
66. Subramenium GA, Viszwapriya D, Prasanth MI, Balamurugan K and **Pandian SK** (2015). covR mediated antibiofilm activity of 3-Furancarboxaldehyde increases the virulence of Group A Streptococcus. [PLOS ONE](#) [Public Library of Science, USA] 10(5): e0127210 (Impact Factor: 3.534)
67. Viszwapriya D, Aravindraja C and **Pandian SK** (2015). Comparative assessment of bacterial diversity associated with co-occurring eukaryotic hosts of Palk Bay origin. [Indian Journal of Experimental Biology](#) [NISCAIR, CSIR, India] 53:417-423 (Impact Factor: 0.835).
68. Santhakumari S, Kannappan A, **Pandian SK**, Thajuddin N, Rajendran RB and Ravi AV (2015). Inhibitory effect of marine cyanobacterial extract on biofilm formation and virulence factor production of bacterial pathogens causing vibriosis in aquaculture. [Journal of Applied Phycology](#) [Springer] DOI: 10.1007/s10811-015-0554-0 (Impact Factor: 2.492).
69. Nithyanand P, Beema Shafreen RM, Muthamil S, Murugan R and **Pandian SK** (2015) Essential oils from commercial and wild Patchouli modulate Group A Streptococcal biofilms. [Industrial Crops and Products](#) 69:180-186 [Elsevier] (Impact Factor: 3.208).
70. Padmavathi A, Periyasamy M and **Pandian SK** (2015). Assessment of 2, 4-Di-tert-butylphenol induced modifications in extracellular polymeric substances of *Serratia marcescens*. [Bioresource Technology](#) [Elsevier] 188:185-189 (Impact Factor: 4.49).

71. Salini R, Sindhulakshmi M, Poongothai T and **Pandian SK** (2015). Inhibition of quorum sensing mediated biofilm development and virulence in uropathogens by *Hyptis suaveolens*. [Antonie van Leeuwenhoek Journal of Microbiology](#) [Springer] 107:1095-1106 (Impact Factor: 2.137).
72. Nithyanand P, Beema Shafreen RM, Muthamil S and **Pandian SK** (2015). Usnic acid, a lichen secondary metabolite inhibits Group A Streptococcus biofilms. [Antonie van Leeuwenhoek](#) [Springer] 107:263-272 (Impact Factor: 2.137).
73. Padmavathi A, Abinaya A and **Pandian SK** (2014). Phenol, 2, 4- bis(1,1-dimethylethyl) of marine bacterial origin inhibits quorum sensing mediated biofilm formation in an uropathogen *Serratia marcescens*. [Biofouling](#) [Taylor & Francis, UK] 30:1111-22 (Impact Factor: 3.415).
74. Padmavathi A and **Pandian SK** (2014). Antibiofilm activity of biosurfactant producing coral associated bacteria isolated from Gulf of Mannar. [Indian Journal of Microbiology](#) [Springer] 54:376-382 (Impact Factor: 0.832).
75. Beema Shafreen R, Muthamil S and **Pandian SK** (2014). Inhibition of *Candida albicans* virulence factors by novel levofloxacin derivatives. [Applied Microbiology and Biotechnology](#) [Springer, Germany] 98:6775-6785 (Impact Factor: 3.689).
76. Gowrishankar S, Poornima B and **Pandian SK** (2014). Inhibitory efficacy of cyclo (L-Leucyl- L-Prolyl) from mangrove rhizosphere bacterium-*Bacillus amyloliquefaciens* (MMS-50) on the cariogenic properties of *Streptococcus mutans*. [Research in Microbiology](#) [Elsevier, USA] 161:293-304 (Impact Factor: 2.889).
77. Vijayalakshmi P, Selvaraj C, Beema Shafreen R, Singh SK, **Pandian SK** and Daisy P (2014). Ligand based pharmacophore modelling and screening of DNA Minor Groove Binders targeting *Staphylococcus aureus*. [Journal of Molecular Recognition](#) [Wiley] 27:429-37 (Impact Factor: 3.006).
78. Beema Shafreen R, Selvaraj C, Singh SK and **Pandian SK** (2014). *In silico* and *in vitro* studies of cinnamaldehyde and their derivatives against LuxS in *Streptococcus pyogenes*: effects on biofilm and virulence genes. [Journal of Molecular Recognition](#) [Wiley] 27: 106-116 (Impact Factor: 3.006).
79. Kalpana BJ, Sindhulakshmi M and **Pandian SK** (2014) Amylase enzyme from *Bacillus subtilis* S8-18: A potential desizing agent from marine environment. [Biotechnology and Applied Biochemistry](#) [Springer] 61:134-144 (Impact Factor: 1.943).
80. Kalpana BJ and **Pandian SK** (2014) Halotolerant, acid-alkali stable, chelator resistant and raw starch digesting α -amylase from a marine bacterium *Bacillus subtilis* S8-18. [Journal of Basic Microbiology](#) [WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany] 54:802-811 (Impact Factor: 1.266).
81. Rabbind Singh A, Senthamarai kannaan P, Thangavel C, Danda R, **Pandian SK**, Dharmalingam K (2014). ChiS histidine kinase negatively regulates the production of chitinase ChiC in *Streptomyces peucetius*. [Microbiological Research](#) [Elsevier, USA] 169:155-162 (Impact Factor: 1.993).
82. Aravindraja C, Viszwapriya D and **Pandian SK** (2013). Ultradeep 16S rRNA sequencing analysis of geographically similar but diverse unexplored marine samples reveal varied bacterial community composition. [PLOS ONE](#) [Public Library of Science, USA] 8(10): e76724 (Impact Factor: 3.730).
83. Beema Shafreen R and **Pandian SK** (2013). Molecular Modelling and simulation of FabG: An enzyme involved in fatty acid pathway of *Streptococcus pyogenes*. [Journal of Molecular Graphics and Modelling](#) [Elsevier] 45:1-12 (Impact Factor: 2.325).

84. Bakkiyaraj D, Rathna@Nandhini J, Malathy B and **Pandian SK** (2013) Antibiofilm potential of pomegranate (*Punica granatum* L.) extract against human bacterial and fungal pathogens. [Biofouling](#) [Taylor & Francis, UK] 29: 929-937 (Impact Factor: 3.396).
85. Balaji K, Thenmozhi R, Lalitha P and **Pandian SK** (2013) Comparative analysis of *emm* types, superantigen gene profiles and antibiotic resistance genes among *Streptococcus pyogenes* isolates from ocular infections, pharyngitis and asymptomatic children in south India. [Infection, Genetics and Evolution](#) [Elsevier] 19C: 105-112 (Impact Factor: 3.128) (in press).
86. Gowrishankar S, Thenmozhi R, Balaji K and **Pandian SK** (2013). Emergence of methycillin-resistant, vancomycin-intermediate *Staphylococcus aureus* among patients associated with Group A Streptococcal pharyngitis infection in southern India. [Infection, Genetics and Evolution](#) [Elsevier] 14: 383-389 (Impact Factor: 3.128).
87. Beema Shafreen R, Selvaraj C, Singh SK and **Pandian SK** (2013). Exploration of Fluoroquinolones resistance in *Streptococcus pyogenes*: comparative structure analysis of Wild-Type and mutant DNA gyrase. [Journal of Molecular Recognition](#) [Wiley] 26: 276-285 (Impact Factor: 3.31).
88. Packiavathy IASV, Sasikumar P, **Pandian SK** and Ravi AV (2013) Prevention of quorum sensing mediated biofilm development and virulence factors production in *Vibrio* spp. by curcumin. [Applied Microbiology and Biotechnology](#) [Springer, Germany] 97: 10177-10187 (Impact Factor: 3.425).
89. Annapoorani A, Kalpana B, Musthafa KS, **Pandian SK** and Ravi AV (2013) Antipathogenic potential of *Rhizophora* spp. against the quorum sensing mediated virulence factors production in drug resistant *Pseudomonas aeruginosa*. [Phytomedicine](#) [Elsevier GmbH] 20:956-963 (Impact factor: 2.972).
90. Bakkiyaraj D, Sivasankar C and **Pandian SK** (2013). Anti-pathogenic potential of Coral associated bacteria isolated from Gulf of Mannar against *Pseudomonas aeruginosa*. [Indian Journal of Microbiology](#) [Springer] 53:111-113 (Impact Factor: 0.511).
91. Balaji K, Okanjo PA, Thenmozhi R and **Pandian SK** (2013) Virulence and multidrug resistance pattern of *Vibrio cholerae* O1 isolates from diarrhoeal outbreaks of south India during 2006-2009. [Microbial Drug Resistance](#) [Mary Ann Liebert, Inc. Publishers, USA] 19:198-203 (Impact Factor:2.153).
92. Balaji K, Thenmozhi R and **Pandian SK** (2013) Effect of subinhibitory concentrations of fluoroquinolones on biofilm production by clinical isolates of *Streptococcus pyogenes*. [Indian Journal of Medical Research](#) [ICMR] 137: 963-971 (Impact Factor: 1.826).
93. Devi KP, Sakthivel R, Nish SA, Suganthy N and Pandian SK (2013). Eugenol alters the integrity of cell membrane and acts against the nosocomial pathogen *Proteus mirabilis*. [Archives of Pharmacal Research](#) [Springer, Seoul, South Korea] 36:282-292 (Impact Factor:1.588).
94. Gowrishankar S, Duncan MN and **Pandian SK** (2012). Coral associated bacteria as a promising antibiofilm agent against methicillin resistant and susceptible *Staphylococcus aureus* biofilms. [Evidence-Based Complementary and Alternative Medicine](#) [Hindawi Publishing Corp.] Volume 2012, Article ID 862374; <http://dx.doi.org/10.1155/2012/862374> (Impact Factor: 4.774).
95. Bakkiyaraj D, Sivasankar C and **Pandian SK** (2012). Inhibition of quorum sensing regulated biofilm formation in *Serratia marcescens* causing nosocomial infections. [Bioorganic & Medicinal Chemistry Letters](#) [Elsevier] 22:3089-3094 (Impact Factor: 2.661).
96. Kalpana BJ, Aarthy S and **Pandian SK** (2012) Antibiofilm activity of alpha-amylase from *Bacillus subtilis* S8-18 against biofilm forming human bacterial pathogens. [Applied Biochemistry and Biotechnology](#) [Humana Press, USA] 167:1778-1794 (Impact Factor: 1.879).

97. Balaji K, Thenmozhi R, Sundaravadivel M and **Pandian SK** (2012) Comparison of bacterial communities in the throat swabs from healthy subjects and pharyngitis patients by terminal restriction fragment length polymorphism. [Applied Biochemistry and Biotechnology](#) [Humana Press, USA] 167:1459-1773 (Impact Factor: 1.879).
98. Nithya C and **Pandian SK** (2012) Evaluation of bacterial diversity in Palk Bay sediments using terminal-restriction fragment length polymorphisms (T-RFLP). [Applied Biochemistry and Biotechnology](#) [Humana Press, USA] 167:1763-1777 (Impact Factor: 1.879).
99. Annapoorani A, Parameswari R, **Pandian SK** and Ravi AV (2012) Methods to determine antipathogenic potential of phenolic and flavonoid compounds against urinary pathogen *Serratia marcescens*. [Journal of Microbiological Methods](#) [Elsevier] 91:208-211 (Impact factor: 2.018).
100. Musthafa KS, Sivamaruthi BS, **Pandian SK** and Ravi AV (2012) Quorum sensing inhibition in *Pseudomonas aeruginosa* PAO1 by antagonistic compound phenyl acetic acid. [Current Microbiology](#) [Springer] 65:475-480 (Impact factor: 1.51).
101. Annapoorani A, Jabbar AKKA, Musthafa KS, **Pandian SK** and Ravi AV. (2012). Inhibition of quorum sensing mediated virulence factors production in urinary pathogen *Serratia marcescens* PS1 by marine sponges. [Indian Journal of Microbiology](#) (Springer) 52: 160-166 (Impact factor: 0.511)
102. Packiavathy IASV, Agilandeswari P, Musthafa KS, **Pandian SK** and Ravi AV (2012) Antibiofilm and quorum sensing inhibitory potential of *Cuminum cyminum* and its secondary metabolite methyl eugenol against Gram negative bacterial pathogens. [Food Research International](#) [Elsevier, USA] 45:85-92 (Impact Factor: 2.416).
103. Musthafa KS, **Pandian SK** and Ravi AV (2012) Inhibition of quorum-sensing-dependent phenotypic expression in *Serratia marcescens* by marine sediment Bacillus spp. SS4. [Annals of Microbiology](#) [Springer Verlag, Germany] 62:443-447 (Impact Factor: 0.350).
104. Karthikeyan A, Kumar RR, Kumar NS, Amri ISA, **Pandian SK** and Ramseh M (2012). Antibiofilm activity of *Dendrophthoe falcata* against different bacterial pathogens. [Planta Medica](#) (Georg Thieme Verlag KG, Germany) 78:1-9, 2012 (Impact Factor: 2.153).
105. Chandra Babu NK, Swarna Kumari B, Vimalarani SH, Shanthi C, **Pandian SK** and Sadulla S (2012) Microbiological aspects of hide and skin preservation by chilling. [Journal of Society for Leather Technologists and Chemists](#) 96:71-76 (Impact Factor: 0.561).
106. Jayakumar K, Rajesh R, Dharuman V, Venkatasana R, Hahn JH and **Pandian SK** (2012) Gold nano particle decorated graphene core first generation PAMAM dendrimer for label free electrochemical DNA hybridization sensing. [Biosensors and Bioelectronics](#) [Elsevier] 31: 406- 412 (Impact Factor: 5.397).
107. Kiruthiga PV, Mohanasundari V, Pravina M, Pandian SK and Devi KP (2012). p53 Exon 4 (codon 72) Polymorphism and Exon 7 (codon 249) Mutation in Breast Cancer Patients in Southern Region (Madurai) of Tamil Nadu. [Asian Pacific Journal of Cancer Prevention](#) [National Cancer Center of Korea] 13: 511-516 (Impact Factor: 1.240).
108. Beema Shafreen R, Srinivasan S, Manisankar P and **Pandian SK** (2011). Biofilm formation by *Streptococcus pyogenes*: modulation of exopolysaccharide by fluoroquinolone derivatives. [Journal of Bioscience and Bioengineering](#) [Society for Biotechnology, Japan; Distributed outside Japan by Elsevier] 112:345-50 (Impact Factor 1.707)
109. Musthafa KS, Balamurugan K, **Pandian SK** and Ravi AV (2011) 2, 5 - piperazinedione inhibits quorum sensing dependent factors production in *Pseudomonas aeruginosa* PAO1. [Journal of Basic Microbiology](#) [Wiley] 52:1-8 (Impact Factor: 1.395).
110. Packiavathy ISV, Agilandeswari P, Rajendran RB, **Pandian SK** and Ravi AV (2011) Anti-quorum sensing and antibiofilm potential of *Capparis spinosa*. [Archives of Medical Research](#) [Elsevier] 42:658-668 (Impact Factor: 1.986).

111. Bakkiyaraj D, Sivasankar C and **Pandian SK** (2011). Coral associated bacteria as a novel source for antibiofilm and quorum quenching agents. [Clinical Microbiology and Infection](#) [Wiley] 21(S4): S542 (Impact Factor 4.784).
112. Katiyar SP, Bakkiyaraj D and **Pandian SK** (2011). Role of aromatic stack pairing at the catalytic site of gelonin protein. [Biochemical and Biophysical Research Communications](#) [Elsevier] 410: 75-80 (Impact Factor 2.595).
113. Nithya C, Devi MG and **Pandian SK** (2011) A novel compound from marine bacterium *Bacillus pumilus* S6-15 inhibits biofilm formation in Gram positive and Gram negative species. [Biofouling](#) [Taylor & Francis, UK] 27: 519-528 (Impact Factor: 4.415).
114. Ibrahim KS, Muniyandi J and **Pandian SK** (2011) Cloning, sequence and structural analysis of dehairing Mn²⁺ dependent alkaline serine protease (MASPT) of *Bacillus pumilus* TMS55. [Protein and Peptide Letters](#) [Bentham Science Publishers] 18: 1035-1041 (Impact Factor 1.849).
115. Nithyanand P, Manju S and **Pandian SK** (2011) Phylogenetic characterization of culturable Actinomycetes associated with the mucus of the coral *Acropora digitifera* from Gulf of Mannar. [FEMS Microbiology Letters](#) [Wiley-Blackwell, UK] 314: 112-118 (Impact Factor: 2.199).
116. Nithyanand P, Indhumathi T, Ravi AV and **Pandian SK** (2011) Culture independent characterization of bacteria associated with the mucus of the coral *Acropora digitifera* from the Gulf of Mannar. [World Journal of Microbiology and Biotechnology](#) [Springer Netherlands] 27:1399-1406 (Impact Factor: 1.082).
117. Thenmozhi R, Balaji K, Kumar R, Rao TS and **Pandian SK** (2011) Characterization of biofilms in different clinical M serotypes of *Streptococcus pyogenes*. [Journal of Basic Microbiology](#) [Wiley-VCH, Germany] 51: 1-9 (Impact Factor: 1.395).
118. Nithya C, Gnanalakshmi B and **Pandian SK** (2011) Assessment and characterization of heavy metal resistance in Palk Bay sediment bacteria. [Marine Environmental Research](#) [Elsevier, USA] 71:283-294 (Impact Factor: 1.953).
119. Ibrahim KS, Muniyandi J and **Pandian SK** (2011) Purification and characterization of a manganese dependent alkaline serine protease from *Bacillus pumilus* TMS55. [Journal of Microbiology and Biotechnology](#) [The Korean Society for Microbiology and Biotechnology, Seoul, Korea] 21: 20-27 (Impact Factor: 1.224).
120. Rajarajan S, Ibrahim KS and **Pandian SK** (2011) AP-APSE dpol intein: A novel family A DNA polymerase intein domain. [Bioinformatics](#) 6: 149-152 [Biomedical Informatics, India] [ISSN 0973-2063 (online) 0973-8894 (print)].
121. Musthafa KS, Saroja V, **Pandian SK** and Ravi AV (2011) Antipathogenic potential of marine Bacillus sp. SS4 on AHL mediated virulence factors production in *Pseudomonas aeruginosa* (PAO1). [Journal of Biosciences](#) [Indian Academy of Sciences] 36:55-67 (Impact Factor: 1.956).
122. Srinivasan S, Beema Shafreen R, Nithyanand P, Manisankar P and Pandian SK (2010). Synthesis and *in vitro* antimicrobial evaluation of novel fluoroquinolone derivatives. [European Journal of Medicinal Chemistry](#) [Elsevier, The Netherlands] 45: 6101-6105 (Impact Factor 3.346).
123. Bakkiyaraj D and **Pandian SK** (2010) *In vitro* and *in vivo* antibiofilm activity of coral associated actinomycete against drug resistant *Staphylococcus aureus* biofilms. [Biofouling](#) [Taylor & Francis, UK] 26:711-717 (Impact Factor: 4.415).
124. Nithya C and **Pandian SK** (2010) The *in vitro* antibiofilm activity of selected marine bacterial culture supernatants against *Vibrio* spp. [Archives of Microbiology](#) [Springer, Germany] 192:843-854 (Impact Factor: 1.927).

125. Nithya C, Begum MF and **Pandian SK** (2010) Marine bacterial isolates inhibit biofilm formation and disrupt mature biofilms of *Pseudomonas aeruginosa* PAO1. [Applied Microbiology and Biotechnology](#) [Springer, Germany] 88:341-358 (Impact Factor: 2.896).
126. Thenmozhi R, Balaji K, Kanagavel M, **Pandian SK** (2010) Development of species-specific primers for detection of *Streptococcus pyogenes* from throat swabs. [FEMS Microbiology Letters](#) [Wiley-Blackwell, UK] 306:110-116 (Impact Factor: 2.199).
127. Nithya C, Aravindraja C and **Pandian SK** (2010) *Bacillus pumilus* of Palk Bay origin inhibits quorum sensing mediated virulence factors in Gram negative bacteria. [Research in Microbiology](#) [Elsevier, USA] 161:293-304 (Impact Factor: 2.154).
128. Nithyanand P, Thenmozhi R, Rathna J and **Pandian SK** (2010) Inhibition of biofilm formation in *Streptococcus pyogenes* by coral associated actinomycetes. [Current Microbiology](#) [Springer, USA] 60: 454-460 (Impact Factor: 1.33).
129. Nithya C and **Pandian SK** (2010) Isolation of heterotrophic bacteria from Palk Bay sediments showing heavy metal tolerance and antibiotic production. [Microbiological Research](#) [Elsevier, USA] 165:578-593 (Impact Factor: 2.054).
130. Musthafa KS, Ravi AV, Annapoorani A, Packiavathy ISV and **Pandian SK** (2010) Evaluation of anti-quorum sensing activity of edible plants and fruits through inhibition of AHL system in *Chromobacterium violaceum* and *Pseudomonas aeruginosa*. [Chemotherapy](#) [Karger, Switzerland] 56:333-339 (Impact Factor: 2.028).
131. Devi KP, Sivamaruthi B, Kiruthiga PV and Pandian SK (2010). Study of p53 codon 72 polymorphism and codon 249 mutations in Southern India in relation to age, alcohol drinking and smoking habits. [Human & Experimental Toxicology](#) [Sage Publications Ltd, Finland] 29:451-458 (Impact Factor: 1.456).
132. Thenmozhi R, Nithyanand P, Rathna J and **Pandian SK** (2009) Antibiofilm activity of coral associated bacteria against different clinical M serotypes of *Streptococcus pyogenes*. [FEMS Immunology & Medical Microbiology](#) [Wiley-Blackwell, UK] 57:284-294 (Impact Factor: 2.335).
133. Ibrahim KS, Bakkiyaraj D, James R, Ganesh TG and **Pandian SK** (2009) Isolation and sequence analysis of a small cryptic plasmid pRK10 from a corrosion inhibitor degrading strain *Serratia marcescens* ACE2. [Plasmid](#) [Elsevier, USA] 62:183-190 (Impact Factor: 1.816).
134. Nithyanand P and **Pandian SK** (2009) Phylogenetic characterization of culturable bacterial diversity associated with the mucus and tissue of the coral *Acropora digitifera* from Gulf of Mannar. [FEMS Microbiology Ecology](#) [Wiley-Blackwell, UK] 69:384-394 (Impact Factor: 3.598).
135. Ganesh Babu T, Nithyanand P, Chandra Babu NK and **Pandian SK** (2009) Evaluation of Cetyltrimethylammonium Bromide as a potential short term preservative agent for stripped goat skin. [World Journal of Microbiology and Biotechnology](#) [Springer Netherlands] 25:901-907 (Impact Factor: 1.082).

Book

Bioinformatics – A Student's Companion

Ibrahim KS, Gurusubramanian G, Zothansanga, Yadav RP, Kumar NS, **Pandian SK**, Borah P and Mohan S (Authors). Springer Science+Business Media Singapore Private Ltd., Singapore. ISBN: 978-981-10-1856-5