

Department of Nanotechnology

Dr. Deepak Kukkar

Research Publications

Research Papers Published in International/National Journals:

Research Papers in SCI Journals						
S No	Authors	Title of the Paper	Journal's Name	Publisher	Vol./ Page No./ Year	Impact Factor
1	EhsanulKabir, AbdelmonaimAzzouz, Nadeem Raza, Sanjeev Kumar Bhardwaj, Ki-Hyun Kim, MeisamTabatabaei, Deepak Kukkar	Recent advances in monitoring, sampling, and sensing techniques for bioaerosols in the atmosphere	ACS Sensors	American Chemical Society	https://doi.org/10.1021/acssensors.9b02585	6.94
2	Deepak Kukkar , Aruna Rani, Vanish Kumar, Sherif A. Younis, Ming Zhang, Sang-Soo Lee, Daniel C.W. Tsang, Ki-Hyun Kim	Recent advances in carbon nanotube sponge-based sorption technologies for mitigation of marine oil spills	Journal of Colloids and Interface Science	Elsevier B.V.	https://doi.org/10.1016/j.jcis.2020.03.006	6.36
3	Vanish Kumar, Yoon-Seo Lee, Jae-Won Shin, Ki-Hyun Kim, Deepak Kukkar , Yiu Fai Tsang	Potential applications of graphene-based nanomaterials as adsorbent for removal of volatile organic compounds	Environment International	Elsevier B.V.	Accepted for Publication	7.94
4	Botao Liu, Azmatullah Khan, Ki-Hyun Kim, Deepak Kukkar , Ming Zhang	The adsorptive removal of lead ions in aquatic media: Performance comparison between advanced functional materials and conventional materials	Critical reviews in Environmental Science and Technology	Taylor and Francis	Accepted for publication	5.98
5	WaseemRaza, Deepak Kukkar , HammadSaulat, NadeemRaza, MudassarAzam, AndleebMehmood, Ki-Hyun Kim	Metal-organic frameworks as an emerging tool for sensing various targets in aqueous and biological media	Trends in Analytical Chemistry	Elsevier Publishers	https://doi.org/10.1016/j.trac.2019.115654	8.428
6	Karanveer Singh, Deepak Kukkar , Ravinder Singh, Preeti Kukkar, Nardev Bajaj, Jagpreet Singh, Mohit Rawat, Akshay Kumar, Ki-Hyun Kim	In situ green synthesis of Au/Ag nanostructures on a metal-organic framework surface for photocatalytic reduction of p-nitrophenol	Journal of Industrial and Engineering Chemistry	Elsevier Publishers	https://doi.org/10.1016/j.jiec.2019.09.008	4.98

7	Jagpreet Singh, HarpreetKaur, Deepak Kukkar , Vineet Kumar Mukamia, Sanjeev Kumar, Mohit Rawat	Green synthesis of SnO ₂ NPs for solar light induced photocatalytic applications	Materials Research Express	IOP	https://doi.org/10.1088/2053-1591/ab4412	1.49
8	Jagpreet Singh, Vanish Kumar, Sukhwinder Singh Jolly, Ki-Hyun Kim, Mohit Rawat, Deepak Kukkar , Yiu Fai Tsang	Biogenic synthesis of silver nanoparticles and its photocatalytic applications for removal of organic pollutants in water	Journal of Industrial and Engineering Chemistry	Elsevier Publishers	https://doi.org/10.1016/j.jiec.2019.08.002	4.98
9	Navneet Kaur, Jagpreet Singh, GaganpreetKaur, Sanjeev Kumar, Deepak Kukkar , Mohit Rawat	CTAB assisted co-precipitation synthesis of NiO nanoparticles and their efficient potential towards the removal of industrial dyes	Micro & Nano Letters	IET Digital Library	14(8)/ 856 – 859/2019	0.841
10	Vanish Kumar, Deepak Kukkar , Beshare Hashemi, Akashdeep, Ki-Hyun Kim	Advanced functional structure-based diverse sensing and imaging strategies for cancer detection: possibilities, opportunities, challenges, and prospects	Advanced Functional Materials	Wiley	1807859/1-43/2019	15.62
11	Rajkumar Thangavel, Deepak Kukkar , Ki-Hyun Kim, Jong Ryeul Sohn, Akash Deep	Cyclodextrin-Metal–Organic Framework (CD-MOF): From Synthesis to Applications	Journal of Industrial and Engineering Chemistry	Elsevier Publishers	https://doi.org/10.1016/j.jiec.2018.12.048 /2019	4.98
12	Kowsalya Vellingiri, Ya-Xin Deng, Ki-Hyun Kim, Jheng-Jie Jiang, Taejin Kim, Jin Shang, Wha-SeungAhn, Deepak Kukkar , and Danil W. Boukhvalov	Amine Functionalized Metal-organic Frameworks and Covalent Organic Polymers as Potential Sorbents for Removal of Formaldehyde in Aqueous Phase: Experimental Vs. Theoretical Study	ACS applied materials & interfaces	American Chemical Society	11 (1)/1426–1439/2019	8.456
13	Vanish Kumar, Deepak Kukkar , Kowsalya Vellingiri, Sandeep Kumar, Ki-Hyun Kim	Recent advances and opportunities in the treatment of hydrocarbons and oils: Metal-organic frameworks-based approaches	Critical reviews in Environmental Science and Technology	Taylor and Francis	https://doi.org/10.1080/10643389.2018.1554402 /2019	5.98
14	Deepak Kukkar , Kowsalya Vellingiri, Vanish Kumar, Akash Deep, Ki-Hyun Kim	A critical review on the metal sensing capabilities of optically active nanomaterials: Limiting factors, mechanism, and performance evaluation	Trends in Analytical Chemistry	Elsevier Publishers	109/227-246/2018	8.428

15	Deepak Kukkar , Kowsalya Vellingiri, Rajnish Kaur, Sanjeev Kumar Bhardwaj, Akash Deep, Ki-Hyun Kim	Nanomaterials for sensing of formaldehyde in air: Principles, applications, and performance evaluation	Nano Research	Springer	12(2)/225- 246/2019	8.515
16	Karanveer Singh, Deepak Kukkar , Ravinder Singh, Preeti Kukkar, Ki- Hyun Kim	Exceptionally stable green-synthesized gold nanoparticles for highly sensitive and selective colorimetric detection of trace metal ions and volatile aromatic compounds	Journal of Industrial and Engineering Chemistry	Elsevier B.V.	68/33- 41/2018	4.98
17	Deepak Kukkar , Kowsalya Vellingiri, Akash Deep, Ki-Hyun Kim	Recent Progress in Biological and Chemical Sensing by Luminescent Metal- Organic Frameworks	Sensors and Actuators B: Chemical	Elsevier B.V.	270/1346- 1370/2018	6.393
18	Rajnish Kaur, Deepak Kukkar , Sanjeev K. Bhardwaj, Ki-Hyun Kim, Akash Deep	Potential use of polymers and their complexes as media for storage and delivery of fragrances	Journal of Controlled Release	Elsevier B.V.	285/81- 95/2018	7.901
19	Preeti Kukkar, Deepak Kukkar , Heena Sammi, Karanveer Singh, Mohit Rawat, Pritpal Singh, Soumen Basu, Ki-Hyun Kim	A facile means for the improvement of sensing properties of metal- organic frameworks through control on the key synthesis variables	Sensors and Actuators B: Chemical	Elsevier B.V.	271/157- 163/2018	6.393
20	Heena Sammi, Deepak Kukkar , Jaskaran Singh, Preeti Kukkar, Rajwinder Kaur, Harmanpreet Kaur, Mohit Rawat, Gurjinder Singh, Ki- Hyun Kim	Serendipity in solution- GQDs zeolitic imidazole frameworks nanocomposites for highly sensitive detection of sulfide ions	Sensors and Actuators B: Chemical	Elsevier B.V.	255/3047- 3056/2018	6.393
21	Kumar Vikrant, Daniel CW Tsang, Nadeem Raza, Balendu Shekher Giri, Deepak Kukkar , Ki- Hyun Kim	Potential Utility of Metal- Organic Framework- Based Platform for Sensing Pesticides	ACS applied materials & interfaces	American Chemical Society	10(10)/8797- 8817/2018	8.456
22	Deepak Kukkar , Inderpreet Kaur, Jagtar Singh, Lalit M Bharadwaj	Encapsulation and Release of Doxorubicin from Plasticizer- Transformed Poly (ϵ - Caprolactone) Microcapsules	Polymer- Plastics, Technology and Engineering	Taylor and Francis	57(11)/1110- 1120/2018	1.655

23	Gurjinder Singh, Jagpreet Singh, Sukhwinder Singh Jolly, Rohit Rawat, Deepak Kukkar , Sanjeev Kumar, Soumen Basu, Mohit Rawat	Fructose modified synthesis of ZnO nanoparticles and its application for removal of industrial pollutants from water	Journal of Materials Science: Materials in Electronics	Springer US	29(9)/7364-7371/2018	2.324
24	Jagpreet Singh, Preeti Kukkar, Heena Sammi, Mohit Rawat, Gurjinder Singh, Deepak Kukkar	Enhanced catalytic reduction of 4-nitrophenol and congo red dye By silver nanoparticles prepared from Azadirachta indica leaf extract under direct sunlight	Particulate Science & Technology	Taylor & Francis	https://doi.org/10.1080/02726351.2017.1390512	1.38
25	Kumar Vikrant, Vanish Kumar, Ki-Hyun Kim, Deepak Kukkar	Metal-organic frameworks (MOFs): potential and challenges for capture and abatement of ammonia	Journal of Materials Chemistry A	Royal Society of Chemistry	5(44)/22877-22896/2017	10.73
26	Gurjinder Singh, Sudhakar Panday, Mohit Rawat, Deepak Kukkar , Sanjeev Kumar, Soumen Basu	Low Temperature Synthesis of Elongated Triangular Bipyramidal ZnO Nanostructures for Photocatalytic Activity	Journal of Nano Research	Trans Tech Publications	52/1-14/2018	0.511
27	Harpreet Kaur, Girish C Mohanta, Vandana Gupta, Deepak Kukkar , Sachin Tyagi	Synthesis and characterization of ZIF-8 nanoparticles for controlled release of 6-mercaptopurine drug	Journal of Drug Delivery Science and Technology	Elsevier B.V.	41/106-112/2017	2.606
28	Jagpreet Singh, Jasmeet Singh, Navalpreet Singh, Deepak Kukkar , Sanjeev Kumar and Mohit Rawat	Synthesis of Cu and Ce co-doped ZnO Nanoparticles: Crystallographic, Optical, Molecular, Morphological and Magnetic studies	Materials Science Poland	De Gruyter Open	35 (2)/427-434/2017	0.918
29	Gurjinder Singh, Sudhakar Panday, Mohit Rawat, Deepak Kukkar and Soumen Basu.	Facile Synthesis of CuO Semiconductor Nanorods for Time Dependent Study of Dye Degradation and Bioremediation Applications	Journal of Nanoresearch.	Trans Tech Publications	46/154-164/2017	0.511
30	Deepak Kukkar , Jagtar Singh, Inderpreet Kaur & Lalit M. Bharadwaj	Plasticizers Induced Formation of Microcapsules from Freeze Dried Polystyrene Microreactors	International Journal of Polymeric Materials and Polymeric Biomaterials	Taylor & Francis	64/385-391/2015	2.263

31	Deepak Kukkar, ManilKukkar, Jagtar Singh, Inderpreet Kaur, Lalit M. Bharadwaj	Synthesis of Poly(ϵ -caprolactone) microreactors by micro-volcanic rupture of freeze dried microspheres	Polymeric Plastics Technology & Engineering	Taylor & Francis	51 (12). 1275-1281 (2012)	1.655
32	Harsimran Kaur, Suresh Kumar, Deepak Kukkar, Inderpreet Kaur, Kashmir Singh, Lalit M. Bharadwaj	Transportation of Drug-(Polystyrene Bead) Conjugate by Actomyosin Motor System	Journal of Biomedical Nanotechnology	American Scientific Publishers	6/1-8/2010	4.521
Publications in Non-SCI Journals						
S No	Authors	Title of the Paper	Name of Journal & Place of Publication	ISSN No.	Vol./ Page No/ Year	Impact Factor
1	Jagpreet Singh, NavneetKaur, PawanpreetKaur, SukhmeenKaur, JasneetKaur, Preeti Kukkar, Vishal Kumar, Deepak Kukkar, Mohit Rawat	<i>Piper betle</i> leaves mediated synthesis of biogenic SnO ₂ nanoparticles for photocatalytic degradation of reactive yellow 186 dye under direct sunlight	Environmental Nanotechnology, Monitoring and Management	Elsevier B.V.	10/331-338/2018	---
2	Preeti Kukkar, Heena Sammi, Mohit Rawat, Pritpal Singh, Soumen Basu, Deepak Kukkar	Bioconjugation of luminescent Eu-BDC-NH ₂ MOFs for highly efficient sensing of BSA	AIP conference proceedings/ AIP	---	1953/030203	No
3	Manpreet Kaur, Harsimran Kaur, Deepak Kukkar	Synthesis and characterization of graphene oxide using modified Hummer's method	AIP conference proceedings/ AIP	---	1953/030180	No
4	Preeti Kush, Deepak Kukkar, Parveen Kumar, Amit L. Sharma, Akashdeep, I. P. Kaur, Ranjit Singh and Lalit M. Bharadwaj.	Development and Evaluation of Novel Biodegradable Docetaxel Loaded Microspheres of Poly (D, L-Lactide-Co-Glycolic acid) and Poly (ϵ -Caprolactone) for Controlled Drug Delivery	Journal of Pharmaceutical Research & Clinical Practice	ISSN 2231-4237	1(3), 12-35 (2011)	No
5	Deepak Kukkar, Inderpreet Kaur, Jagtar Singh and Lalit M. Bhardwaj	Study of encapsulation of Quantum Dots in freeze dried polystyrene and poly (ϵ -caprolactone) microspheres	World Academy of Science, Engineering and Technology	ISSN 2010-3778	76, 778-780 (2011)	No
6	Jagpreet Singh, Navalpreet Singh, AditiRathi, Deepak Kukkar and Mohit Rawat	Facile Approach to Synthesize and Characterization of Silver Nanoparticles by Using Mulberry Leaves Extract	Journal of Nanostructure	University of Kashan Print	7(2)/134-140/2017	---

		in Aqueous Medium and its Application in Antimicrobial Activity		ISSN 2251-7871 Online ISSN 2251-788X		
7	Balpreet Singh, Himanshi Sharma, BarinderKaur, Jaskaran Singh, Gurpreet Singh, Navalpreet Singh and DeepakKukkar.	Highly efficient Yttrium based Metal organic Framework for removal of pollutant dyes	Nanohybrids and Composites	Trans Tech Publications	12/51-56/2016	---
8	Tanvi Sharma, HarpreetKaur, AmandeepKaur, Mandeep Singh, NavdeepKaur, MukeshKanwar and DeepakKukkar	Synthesis of Iron Based Biocompatible Metal Organic Frameworks for Microencapsulation of Docetaxel.	Nanohybrids and Composites	Trans Tech Publications	12/74-78/2016	---
9	Deepak Kukkar, Harsimran Kaur, Jagtar Singh, Inderpreet Kaur & Lalit M. Bharadwaj	Immobilization of Quantum Dots Encapsulated Polystyrene Microcapsules for Multianalyte Sensing	Advanced Science Letters	American Scientific Publishers ISSN 1936-6612 (Print)	17, 49-55 (2012)	1.25 (2010)
10	Parveen Kumar, Deepak Kukkar, Akashdeep & Lalit M. Bharadwaj	Synthesis of mercaptopropionic acid stabilized CdS quantum dots for bioimaging in breast cancer	Advanced Materials. Letters	VBRI Press ISSN 0976-3961	3(6), 471-475 (2012)	---