

Curriculum Vitae

Prof. Gaddam Vijaya Prakash

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About Professor G.Vijaya Prakash

After joining IIT Delhi in 2005, Prof. G. Vijaya Prakash initiated the new research field, “Nanophotonics”: the study of nanostructures in photonic environment. His research interests span quantum functional materials, nonlinear optics and glass photonics. One of his extensive two decades long contribution is in the field of inorganic-organic hybrid perovskites, witnessed the commercial realization of next generation solar cells and LEDs. He is one of few initiators of research on photonic crystals in India, specifically focusing on experimental realization of electron-photon strong coupling and nonlinear device methodologies. He is widely known for nonlinear rare-earth spectroscopy/imaging of specialty glasses and phosphors for optoelectronic devices. Some of his notable research works are in demonstrating optical gain from silicon nanocrystals, shortest confocal laser cavity for atom manipulation and strong coupling, low-cost SERS substrate commercialization. He has been recipient of research awards from UKIERI (UK), Royal Society (UK), INFM (UK) and IIT Delhi (‘High Impact Research Award’). He was instrumental in establishing DST-FIST Ultrafast Optics (UFO) Lab at IITD. So far, he has guided/guiding 25 Ph.Ds and guided more than 40 post graduate students. His scholarly work is evidenced by more than 200 scientific journal publications with more than 5311 citations, h-index of 42 and i10-index of 93. From the last five years only (2017-21), he published about 72 high repute journal publications. He also held several administrative responsibilities such as Professor in-charge of academic facilities.

Currently he holds Institute Chair Professorship, group leader of Nanophotonics research lab and received Teaching Excellence Award for the year 2020-21. He holds research grants of more than Rs.65 Cr as PI/Co-PI from different funding agencies. He is a long-term visiting faculty at University Southampton and University of Cambridge UK.

Research Specialization: Nanophotonics, Quantum functional materials, Glass technology, photonics crystals/waveguides, Nonlinear optics, Rare-earth doped phosphors and glasses.

Academic Positions:

Year	Academic positions	Institute
2019- to date	Institute Chair professor	IIT Delhi, New Delhi
2016/17 to date	Professor	IIT Delhi, New Delhi
20011-16/17	Associate Professor	IIT Delhi, New Delhi
2004/05- 10	Assistant Professor	IIT Delhi, New Delhi
2019-20	Visiting professor	University of Southampton, UK
2007-15	Visiting professor /researcher	University of Cambridge, UK
2006	Royal Society (UK) visitor	University of Southampton, UK

2002-2004/05	Research Fellow (EPSRC and Royal Society fellow)	University of Cambridge and University of Southampton, UK
1999/00-2002	Post doctoral fellow , (INFM Fellowship)	University of Trento, UK
1998-1999	Post doctoral fellow,(DST/CSIR Fellowship)	University of Hyderabad,India

Sponsored Research Projects: (2005- Till to date ; ~ **Rs. 5.5 Cr.** as PI and **Rs.60Cr.** as Co-PI and others)
 Completed/ongoing projects as PI (012):~ Rs.489 Lacs
 and as CoPI and other (03) : ~5800 Lacs.

Research Guidance :

- Doctoral students : **15 (completed)+ (05 external students) +8 (ongoing)**
- Masters/UG Degree students guidance (~40)

Academic/research Highlights :

- Established “Nanophotonics” research activity
- Our nanophotonics research attracted “High-Impact Research” award (peer reviewed) from IITD- as PI along with other three faculty colleagues
- Top 5 most successful UK-India collaboration- Identified by British council (UKIERI) – selected for Case study by various UK organizations
- Active part in establishing a new lab “*ultrafast Optics*” (supported by IITD and DST-FIST)
- Active part in DRDO-JATC
- Some of the research articles attracted attention as “*Editor’s choice*”, “*Most downloaded paper*”, “*Special edition*”
- Some of our research findings were most often used/ quoted in the recent perovskite PV development
- Best Institute level thesis award to one of my PhD student (2015)
- Several best oral presentation/poster awards for students (International and National)

Contributions of national/international importance

- “*Teaching Excellence Award* “ by IIT Delhi 2021
- Award of “*Institute Chair Professorship*” by IIT Delhi since 2019
- Established “Nanophotonics” research activity
- Our nanophotonics research attracted “High-Impact Research” award (peer reviewed) from IITD- as PI along with other three faculty colleagues
- UK-India Education and research Initiative (UKIERI) awards, 3 times, 2008-2016
- Top 5 most successful UK-India collaboration- Identified by British council (UKIERI) – selected for Case study by various UK organizations
- Active part in establishing a new lab “*ultrafast Optics*” (supported by IITD and DST-FIST)
- Some of the research articles attracted attention as “*Editor’s choice*”, “*Most downloaded paper*”, “*Special edition*”
- Some of our research findings were most often used/ quoted in the recent perovskite PV development
- Best thesis award to one of my PhD students (2015)
- Best oral presentation/poster awards for students (International and National)
- Examiner to many doctoral degrees across India
- Member of INSPIRE (DST) research fellowship awards
- Royal Society UK, Visiting scientist Award 2006
- *Visiting Professor* to University of Southampton, UK since 2017
- *Visiting Senior Researcher* to University of Cambridge, UK since 2006

Research Publications (peer reviewed): > 200+ Conferences/workshops/talks >40

Book Chapters/Reviews: 6

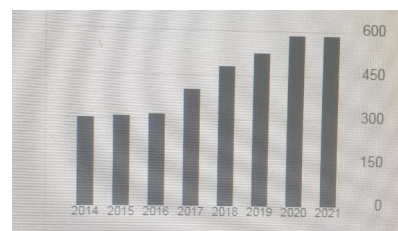
List of publications may be obtained from links

<http://nanophotonics.iitd.ac.in/>

IITD profile <http://iitd.irins.org/profile/70731>

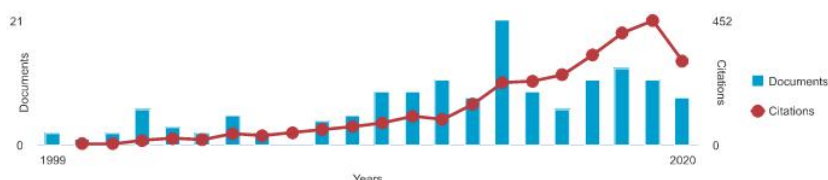
ORCID : <https://orcid.org/0000-0003-0450-3767>

	All	Since 2015
Citations	5311	2909
h-index	42	31
I10-index	93	77
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Document and citation trends:



@Scopus

Book Chapters/Reviews: 6

1. G. Vijaya Prakash, S. Surendra Babu, A. A. Reddy, Optical Amplifiers from Rare-Earth Co-Doped Glass Waveguides, in "Advances in Optical amplifiers", Ed. P. Urquhart, Intech Publishers, Austria (2011) (ISBN: 978-953-307-1345-8)
2. G. Vijaya Prakash, "Thin-film organic photonics: molecular layer deposition and applications by T. Yoshimura" (book review), Journal of Optics, 41 (2012) 184. link
3. G. Vijaya Prakash, "Fundamental Concepts of Semiconductors" Web course for National Programme on Technical Enhanced learning (NPTEL). <http://nptel.iitm.ac.in>
4. G. Vijaya Prakash et al, "Glass Photonics " chapters: "Spectroscopy of Glasses" and "Techniques for Preparation of Glasses" World Scientific', Singapore. (ongoing)
5. " Asian Journal of Physics: A Special Issue Dedicated to Prof D Narayana Rao (University of Hyderabad), Vol 30 , Issue 6, 2021. Guest Edited By : Prof. G Vijaya Prakash (IIT Delhi), Prof. B Maruthi Manoj (IIT Kharagpur) & Prof. Shivakiran Bhaktha B N (IIT Kharagpur). Journal Link : AJP
6. "Recent advances in optics (RAO): Contribution of D Narayana Rao in optics and photonics research in India" Review Article published in Asian Journal of Physics, Vol. 30, No 6 (2021) 837-848 { weblink} and pdf

Research publications in peer-reviewed (SCI) Journals

Total research Publications (peer reviewed): > 200+ Conferences/workshops/talks >40

Citations : ~5311; h-index : 42 i10index: 93

1	Ultrafast Nonlinear Pulse Propagation Dynamics in Metal–Dielectric Periodic Photonic Architectures JN Acharyya, AK Mishra, DN Rao, A Kumar, GV Prakash Advanced Materials Interfaces 8 (19), 2100757	2022
2	Photonic Cavity-Mediated Tunable Ultrafast Absorption Dynamics in BaTiO ₃ -Based One-Dimensional Photonic Crystal JN Acharyya, NR Desai, RB Gangineni, GV Prakash ACS Applied Electronic Materials 3 (4), 1904-1911	
	Study of Surface and Bulk Recombination Kinetics of Two-Dimensional Inorganic–Organic Hybrid Semiconductors under Linear and Nonlinear Femtosecond Transient Absorption Analysis	2021

	M Adnan, GV Prakash The Journal of Physical Chemistry C	
3	Tuning the optical properties of porous silicon-based microcavities by energetic oxygen ion beams for optoelectronic applications CP Verma, K Asokan, D Kanjilal, GV Prakash Materials Letters 306, 130914	2022
4	Nonlinear optical dispersion and higher-order effects in bulk and wavelength-ordered photonic materials JN Acharyya, GV Prakash Optik 247, 167944	2021
5	Effect of Zinc Fluoride addition on structure of barium Borate glasses for nonlinear optical applications MM Neethish, JN Acharyya, GV Prakash, VVRK Kumar Optical Materials 121, 111626	2021
6	Tunable characteristics of porous silicon optical microcavities by energetic N ion beam interactions CP Verma, M Adnan, P Srivastava, K Asokan, D Kanjilal, GV Prakash Journal of Physics D: Applied Physics 55 (1), 015104	2021
7	Photoluminescence down-shifting studies of thermally stable Eu ³⁺ ions doped borosilicate glasses for visible red photonic device applications R Bajaj, AS Rao, GV Prakash Journal of Non-Crystalline Solids 575, 121184	2021
8	Saturation and reverse saturation of nonlinear absorption in laser ablated gold nanoparticles M Priyadarshini, GV Prakash Materials Today: Proceedings	2021
9	Linear and nonlinear optical excitons in primary cyclic ammonium based inorganic–organic hybrid semiconductor series KM Dehury, GV Prakash Materials Today: Proceedings	2021
10	Linear and nonlinear excitation induced ultrafast absorption dynamics in laser ablated and chemically synthesized gold nanoparticle colloids M Priyadarshini, M Adnan, GV Prakash Optical Materials 117, 111206	2021
11	Optical nonlinearities in chemically synthesized and femtosecond laser fabricated gold nanoparticle colloidal solutions M Priyadarshini, JN Acharyya, S Mahajan, GV Prakash Optics & Laser Technology 139, 107008	2021
12	Thermo-physical modeling and experimental validation of core-shell nanoparticle fabrication of nickel-titanium (nitinol) alloy V Parmar, S Singh, S Kumar, GV Prakash, D Kalyanasundaram Optics & Laser Technology 138, 106880	2021
13	Linear and nonlinear photoluminescence from thermally stable KYF ₄ : Eu ³⁺ cubic nanocrystals R Bajaj, AS Rao, GV Prakash Journal of Alloys and Compounds 885, 160893	2021
14	Structure-Dependent (Non)Linear Optical Excitons in Primary Cyclic Ammonium (C _n H _{2n-1} NH ₂ ; n = 3–8)-Based Inorganic–Organic Hybrid Semiconductor ... KM Dehury, PK Kanaujia, M Adnan, M Kumar, S Bhattacharya, ... The Journal of Physical Chemistry C 125 (12), 6821-6831	2021

15	<p>Study of optical nonlinearities in laser ablation produced gold nanoparticles through the Z-scan technique</p> <p>P Mani Jr, VP Gaddam Jr</p> <p>Frontiers in Ultrafast Optics: Biomedical, Scientific, and Industrial ...</p>	2021
16	<p>Ultrafast nonlinear absorption and pulse propagation dynamics in metal-dielectric Photonic structures</p> <p>JN Acharyya, AK Mishra, DN Rao, A Kumar, GV Prakash</p> <p>arXiv preprint arXiv:2102.08740</p>	2021
17	<p>Ultrafast nonlinear absorption and pulse propagation dynamics in metal-dielectric Photonic structures</p> <p>J Nath Acharyya, AK Mishra, D Narayana Rao, A Kumar, ...</p> <p>arXiv e-prints, arXiv: 2102.08740</p>	2021
18	<p>Asian Journal of Physics</p> <p>JN Acharyya, GV Prakash</p> <p>Asian Journal of Physics 30 (6), 837-848</p>	2021
19	<p>Structure-Dependent (Non) Linear Optical Excitons in Primary Cyclic Ammonium ($C_nH_{2n-1}NH_2$; $n=3-8$)-Based Inorganic–Organic Hybrid Semiconductor Series</p> <p>KM Dehury, PK Kanaujia, M Adnan, M Kumar, S Bhattacharya, ...</p>	2021
20	<p>Strong two-photon absorption and ultrafast dynamics of meso-functionalized “push–pull” trans-A₂BC porphyrins</p> <p>S Kumar, JN Acharyya, D Banerjee, VR Soma, GV Prakash, M Sankar</p> <p>Dalton Transactions 50 (18), 6256-6272</p>	2021
21	<p>KLa (0.95– x) Gd x F 4: Eu 3+ hexagonal phase nanoparticles as luminescent probes for in vitro Huh-7 cancer cell imaging</p> <p>M Gupta, R Nagarajan, C Ramamurthy, P Vivekanandan, GV Prakash</p> <p>Dalton Transactions 50 (15), 5197-5207</p>	2021
22	<p>Cavity resonance tunability of porous silicon microcavities by Ar+ ion irradiation</p> <p>CP Verma, K Asokan, PK Kanaujia, M Adnan, D Kanjilal, GV Prakash</p> <p>Applied Surface Science 535, 147696</p>	2021
23	<p>Energy Upconversion in Rare-Earth-Doped Tin-Based Double Halo Perovskites, A₂SnCl₆ (A = K, Rb, and Cs)</p> <p>R Nagarajan, S Ahmad, M Kumar, M Gupta, G Vijaya Prakash</p> <p>European Journal of Inorganic Chemistry 2020 (45), 4295-4302</p>	2020
24	<p>Alternative fabrication methodologies for two-dimensional self-assembled Inorganic–Organic hybrid semiconductors</p> <p>PK Kanaujia, KM Dehury, M Adnan, GV Prakash</p> <p>Optical Materials 110, 110511</p>	2020
25	<p>Laser-induced inter-ion migration and the effect of different long alkylammonium halide functionalization on CH₃NH₃Pb (Br_xI_{1-x})₃ colloidal nanoparticles</p> <p>M Adnan, PK Kanaujia, GV Prakash</p> <p>Applied Surface Science 526, 146789</p>	2020
26	<p>Facile growth and re-crystallization of polymer-based inorganic-organic 2D hybrid composites and their applications</p> <p>PK Kanaujia, M Adnan, KM Dehury, GV Prakash</p> <p>Journal of Alloys and Compounds 829, 154550</p>	2020
27	<p>Real-time dynamic evolution monitoring of laser-induced exciton phase flips in 2D hybrid semiconductor (C₁₂H₂₅NH₃)₂PbI₄</p> <p>M Adnan, KM Dehury, PK Kanaujia, G Vijaya Prakash</p> <p>Journal of Applied Physics 128 (2), 023104</p>	2020

28	Unusual Red-Shift and Enhanced Photoluminescence of BaMgAl ₁₀ O ₁₇ : Eu ²⁺ Phosphor Under Ultraviolet A Excitation for Modern Lighting Systems PC Rao, M Gupta, VV Jaiswal, G Ravinder, CJ Sreelatha, KA Hussain, ... Journal of nanoscience and nanotechnology 20 (6), 3854-3858	2020
29	Giant Optical Nonlinearities of Photonic Minibands in Metal–Dielectric Multilayers JN Acharyya, DN Rao, M Adnan, C Raghavendar, RB Gangineni, ... Advanced Materials Interfaces 7 (11), 2000035	2020
30	Unusual Red-Shift and Enhanced Photoluminescence of BaMgAl ₁₀ O ₁₇ : Eu ²⁺ Phosphor Under Ultraviolet A Excitation for Modern Lighting Systems P Chandar Rao, M Gupta, VV Jaiswal, G Ravinder, CJ Sreelatha, ... Journal of Nanoscience and Nanotechnology 20 (6), 3854-3858	2020
31	A study on up-conversion and energy transfer kinetics of KGdF ₄ : Yb ³⁺ /Er ³⁺ nanophosphors A Prasad, AS Rao, GV Prakash Journal of Molecular Structure 1205, 127647	2020
32	Up-conversion luminescence and EPR properties of KGdF ₄ : Yb ³⁺ /Tm ³⁺ nanophosphors A Prasad, AS Rao, GV Prakash Optik 208, 164538	2020
33	Cavity enhancement in nonlinear absorption and photoluminescence of BaTiO ₃ NK Shihab, JN Acharyya, UPM Rasi, RB Gangineni, GV Prakash, DN Rao Optik 207, 163896	2020
34	Nonlinear optical absorption switching behavior of BaTiO ₃ in asymmetric microcavity NK Shihab, JN Acharyya, UPM Rasi, RB Gangineni, PA Lakshmi, ... Optical Materials 101, 109777	2020
35	Linear and nonlinear optical probing of various excitons in 2D inorganic-organic hybrid structures M Adnan, JJ Baumberg, GV Prakash Scientific reports 10 (1), 1-10	2020
36	Strong structural phase sensitive rare-earth photoluminescence color flips in KLaF ₄ : RE ³⁺ (RE ³⁺ = Eu ³⁺ , Er ³⁺ /Yb ³⁺) nanocrystals R Bajaj, M Gupta, R Nagarajan, AS Rao, GV Prakash Dalton Transactions 49 (29), 10058-10068	2020
37	Structural and ion transport properties of sodium ion conducting Na ₂ MTeO ₆ (M= MgNi and MgZn) solid electrolytes M Dubey, A Kumar, S Murugavel, GV Prakash, DA Jose, CR Mariappan Ceramics International 46 (1), 663-671	2020
38	Photoluminescence Properties of Two Closely Related Isostructural Series Based on Anderson-Evans Cluster Coordinated With Lanthanides S Tewari, M Adnan, VK Balendra, G Jangra, GV Prakash, A Ramanan Polyoxometalates in Catalysis, Biology, Energy and Materials Science	2019
39	Synthesis, Structural, Linear, and Nonlinear Optical Studies of Inorganic–Organic Hybrid Semiconductors (R–C ₆ H ₄ CHCH ₃ NH ₂) ₂ PbI ₄ , (R = CH ₃ , Cl) M Adnan, KN Rao, JN Acharyya, D Kumar, KM Dehury, GV Prakash ACS omega 4 (22), 19565-19572	2019
40	Investigation, modelling and validation of material separation mechanism during fiber laser machining of medical grade titanium alloy Ti6Al4V and stainless steel SS316L V Parmar, A Kumar, GV Prakash, S Datta, D Kalyanasundaram Mechanics of Materials 137, 103125	2019

41	Structural phase transitions and thermal stability in Cu-based 2D inorganic-organic hybrid perovskite systems M Bochalya, PK Kanaujia, GV Prakash, S Kumar AIP Conference Proceedings 2142 (1), 030001	2019
42	Synthesis and electrochemical properties of rGO/polypyrrole/ferrites nanocomposites obtained via a hydrothermal route for hybrid aqueous supercapacitors CR Mariappan, V Gajraj, S Gade, A Kumar, S Dsoke, S Indris, ... Journal of Electroanalytical Chemistry 845, 72-83	2019
43	Structural and optical diversity in copper halide-based ferromagnetic inorganic-organic layered hybrids M Bochalya, PK Kanaujia, GV Prakash, S Kumar Journal of Solid State Chemistry 273, 219-225	2019
44	Magnetism and phase segregation in two-dimensional inorganic-organic (C ₁₂ H ₂₅ NH ₃) ₂ Cu _{1-y} MnyCl ₄ hybrids M Bochalya, GV Prakash, S Kumar Journal of Solid State Chemistry 273, 32-36	2019
45	Optical property evaluation of thoria doped with heavier rare-earth oxides LnO _{1.5} (Ln = Er ³⁺ , Ho ³⁺ , Tm ³⁺ , and Yb ³⁺) M Kumar, M Pokhriyal, M Gupta, G Vijaya Prakash, S Uma, R Nagarajan Journal of the American Ceramic Society 102 (4), 1832-1842	2019
46	Isostructural series of [{Al (H ₂ O) 6} {Ln (pda) 3}]. 10H ₂ O: Synthesis, structure and photoluminescence D Kumar, S Tewari, M Adnan, S Ahmad, GV Prakash, A Ramanan Inorganica Chimica Acta 487, 81-91	2019
47	Structural, absorption and photoluminescence studies of Sm ³⁺ ions doped barium lead alumino fluoro borate glasses for optoelectronic device applications PR Rani, M Venkateswarlu, S Mahamuda, K Swapna, N Deopa, AS Rao, ... Materials Research Bulletin 110, 159-168	2019
48	Color-Tunable Upconversion in Er ³⁺ /Yb ³⁺ -Codoped KLaF ₄ Nanophosphors by Incorporation of Tm ³⁺ Ions for Biological Applications M Gupta, M Adnan, R Nagarajan, G Vijaya Prakash ACS omega 4 (1), 2275-2282	2019
49	Photoluminescence Properties of Two Closely Related Isostructural Series Based on Anderson-Evans Cluster Coordinated With Lanthanides [Ln (H ₂ O) 7 {X (OH) 6Mo ₆ O ₁₈ }]• yH ₂ O, X= Al, Cr S Tewari, M Adnan, V Kumar, G Jangra, GV Prakash, A Ramanan Frontiers in chemistry 6, 631	2019
50	Double perovskite K ₃ InF ₆ as an upconversion phosphor and its structural transformation through rubidium substitution SK Saroj, P Rawat, M Gupta, G Vijaya Prakash, R Nagarajan European Journal of Inorganic Chemistry, 4826-4833	2018
51	Investigation on structural and luminescence features of Dy ³⁺ ions doped alkaline-earth boro tellurite glasses for optoelectronic devices KSRK Reddy, K Swapna, S Mahamuda, M Venkateswarlu, AS Rao, ... Optical Materials 85, 200-210	2018
52	Morphological and luminescence studies on KGdF ₄ : Yb ³⁺ /Tb ³⁺ up-conversion nanophosphors A Prasad, AS Rao, M Gupta, GV Prakash Materials Chemistry and Physics 219, 13-21	2018

53	Pr ³⁺ ions doped single alkali and mixed alkali fluoro tungsten tellurite glasses for visible red luminescent devices CBA Devi, S Mahamuda, K Swapna, M Venkateswarlu, AS Rao, ... Journal of Non-Crystalline Solids 498, 345-351	2018
54	Gold nanoflowers as efficient hosts for SERS based sensing and bio-imaging AS Patel, S Juneja, PK Kanaujia, V Maurya, GV Prakash, A Chakraborti, ... Nano-Structures & Nano-Objects 16, 329-336	2018
55	Ionic conduction and dielectric properties of yttrium doped LiZr ₂ (PO ₄) ₃ obtained by a Pechini-type polymerizable complex route CR Mariappan, P Kumar, A Kumar, S Indris, H Ehrenberg, GV Prakash, ... Ceramics International 44 (13), 15509-15516	2018
56	Angle dependent localized surface plasmon resonance from near surface implanted silver nanoparticles in SiO ₂ thin film RK Bommali, DP Mahapatra, H Gupta, P Guha, D Topwal, ... Journal of Applied Physics 124 (6), 063107	2018
57	Oxidation facilitated antimicrobial ability of laser micro-textured titanium alloy against gram-positive <i>Staphylococcus aureus</i> for biomedical applications V Parmar, A Kumar, M Mani Sankar, S Datta, G Vijaya Prakash, ... Journal of Laser Applications 30 (3), 032001	2018
58	Angle dependent localized surface plasmon resonance from silver nanoparticles embedded in SiO ₂ thin film RK Bommali, DP Mahapatra, H Gupta, P Guha, D Topwal, GV Prakash, ... arXiv preprint arXiv:1805.10576	2018
59	Magnetic phase transition in layered inorganic-organic hybrid (C ₁₂ H ₂₅ NH ₃) ₂ CuCl ₄ M Bochalya, S Kumar, PK Kanaujia, GV Prakash AIP Conference Proceedings 1953 (1), 120022	2018
60	Structural, optical absorption and photoluminescence spectral studies of Sm ³⁺ ions in Alkaline-Earth Boro Tellurite glasses K Siva Rama Krishna Reddy, K Swapna, S Mahamuda, M Venkateswarlu, ... Optical Materials 79, 21-32	2018
61	Structural, optical absorption and photoluminescence spectral studies of Sm ³⁺ ions in Alkaline-Earth Boro Tellurite glasses KSRK Reddy, K Swapna, S Mahamuda, M Venkateswarlu, MS Prasad, ... Optical Materials 79, 21-32	2018
62	Spectroscopic study of Pr ³⁺ ions doped Zinc Lead Tungsten Tellurite glasses for visible photonic device applications R Sharma, AS Rao, N Deopa, M Venkateswarlu, M Jayasimhadri, ... Optical Materials 78, 457-464	2018
63	Photoluminescence investigations on Sm ³⁺ ions doped borate glasses for tricolor w-LEDs and lasers N Deopa, AS Rao, A Choudhary, S Saini, A Navhal, M Jayasimhadri, ... Materials Research Bulletin 100, 206-212	2018
64	Spectroscopic investigations of Nd ³⁺ doped lithium lead alumino borate glasses for 1.06 μm laser applications N Deopa, AS Rao, M Gupta, GV Prakash Optical Materials 75, 127-134	2018
65	Fabrication of Anti-reflective Microstructured Silicon Surfaces Using Nanosecond Fiber Laser Texturing V Parmar, GV Prakash, D Kalyanasundaram Optical Nanostructures and Advanced Materials for Photovoltaics, PTu1A. 4	2017

66	Compositional dependence of red luminescence from Eu ³⁺ ions doped single and mixed alkali fluoro tungsten tellurite glasses CBA Devi, S Mahamuda, K Swapna, M Venkateswarlu, AS Rao, ... Optical Materials 73, 260-267	2017
67	Ultrafast laser based hybrid methodology of silicon microstructure fabrication for optoelectronic applications PK Kanaujia, A Bulbul, V Parmar, GV Prakash Applied Surface Science 420, 63-69	2017
68	Growth of few-and multilayer graphene on different substrates using pulsed nanosecond Q-switched Nd: YAG laser P Kumar, PK Kanaujia, GV Prakash, A Dewasi, I Lahiri, A Mitra Journal of Materials Science 52 (20), 12295-12306	2017
69	Silicon-Based Inorganic–Organic Hybrid Nanocomposites for Optoelectronic Applications PK Kanaujia, A Singh, G Vijaya Prakash Energy Technology 5 (10), 1795-1799	2017
70	Efficient Surface Enhanced Raman Scattering substrates from femtosecond laser based fabrication V Parmar, PK Kanaujia, RK Bommali, GV Prakash Optical Materials 72, 86-90	2017
71	Calcium and Strontium Coordination Polymers Based on Rigid and Flexible Aromatic Dicarboxylates: Synthesis, Structure, Photoluminescence and Dielectric Properties A Bandy, S Murugavel, PK Kanaujia, GV Prakash, A Ramanan ChemistrySelect 2 (27), 8567-8576	2017
72	Pseudocapacitance of Mesoporous Spinel-Type MCo ₂ O ₄ (M = Co, Zn, and Ni) Rods Fabricated by a Facile Solvothermal Route V Kumar, CR Mariappan, R Azmi, D Moock, S Indris, M Bruns, ... ACS omega 2 (9), 6003-6013	2017
73	Wet-chemical synthesis, structural characterization and optical properties of rare-earth doped halo perovskite K ₃ GaF ₆ P Rawat, SK Saroj, M Gupta, GV Prakash, R Nagarajan Journal of Fluorine Chemistry 200, 1-7	2017
74	Spectroscopic studies of Pr ³⁺ doped lithium lead alumino borate glasses for visible reddish orange luminescent device applications N Deopa, AS Rao, S Mahamuda, M Gupta, M Jayasimhadri, D Haranath, ... Journal of Alloys and Compounds 708, 911-921	2017
75	Spectroscopic studies of Pr ³⁺ doped lithium lead alumino borate glasses for visible reddish orange luminescent device applications D Haranath, GV Prakash Journal of Alloys and Compounds 708, 911e921	2017
76	Investigating resonance energy transfer from protein molecules to van der Waals nanosheets AS Patel, P Mishra, PK Kanaujia, SS Husain, GV Prakash, A Chakraborti RSC advances 7 (42), 26250-26255	2017
77	Resonance Raman scattering and ab initio calculation of electron energy loss spectra of MoS ₂ nanosheets A Chakraborti, AS Patel, PK Kanaujia, P Nath, GV Prakash, D Sanyal Physics Letters A 380 (48), 4057-4061	2016
78	Femtosecond Laser Based Fabrication of Nanostructured Silicon V Parmar, PK Kanaujia, RK Bommali, GV Prakash	2016

	International Conference on Fibre Optics and Photonics, W3A. 91	
79	Dy³⁺ ions doped single and mixed alkali fluoro tungsten tellurite glasses for LASER and white LED applications CBA Devi, S Mahamuda, M Venkateswarlu, K Swapna, AS Rao, ... Optical Materials 62, 569-577	2016
80	Arrangement of chromonic liquid crystals near hydrophobic and hydrophilic surfaces A Kumar, SK Pattanayek, A Kumari, GV Prakash Journal of Molecular Liquids 224, 1220-1226	2016
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